

# CAPACITY MANAGEMENT TOOLS USER MANUAL

Version 2.0

March 2004

Revised May 2005

Department of Veterans Affairs
VistA Health Systems Design & Development (HSD&D)
Development and Infrastructure Support (DaIS)

# **Revision History**

## **Documentation Revisions**

The following table displays the revision history for this document. Revisions to the documentation are based on patches and new versions released to the field.

Date	Revision	Description	Author
03/24/04	1.0	Initial Capacity Management Tools V. 2.0 software documentation creation.	Robert Kamarowski, Bay Pines, FL Office of Information Field Office (OIFO) and Thom Blom, Oakland, CA OIFO
04/15/04	1.1	Corrected references to CPRS and OE/RR software versions with regard to Patch OR*3.0*209 in the "Start/Stop Timing Collection" topic in Chapter 3, "CM Tools: Options."	Robert Kamarowski, Bay Pines, FL OIFO and Thom Blom, Oakland, CA OIFO
12/20/04	1.2	Reviewed document and edited for the "Data Scrubbing" and the "PDF 508 Compliance" projects.	Thom Blom, Oakland, CA OIFO
		Data Scrubbing—Changed all patient/user TEST data to conform to HSD&D standards and conventions as indicated below:	
		The first three digits (prefix) of any Social Security Numbers (SSN) start with "000" or "666."	
		Patient or user names are formatted as follows:     MMPDPATIENT,[N] or KMPDUSER,[N] respectively, where the N is a number written out and incremented with each new entry (e.g., KMPDPATIENT, ONE, KMPDPATIENT, TWO, etc.).	
		Other personal demographic- related data (e.g., addresses, phones, IP addresses, etc.) were also changed to be generic.	
		PDF 508 Compliance—The final PDF document was recreated and now supports the minimum requirements to be 508 compliant (i.e., accessibility tags, language selection, alternate text for all images/icons, fully functional Web links, successfully passed Adobe Acrobat	

		Quick Check).	
05/31/05	1.3	Updated the CP Environment Check [KMPD STATUS] option based on changes introduced with Capacity Management Tools Patch XMPD*2.0*3.	Robert Kamarowski, Bay Pines, FL OIFO and Thom Blom, Oakland, CA OIFO

Table i: Documentation revision history

## **Patch Revisions**

There are no patches for this initial release of the Capacity Management Tools Version 2.0 software. In the future, for a complete list of patches related to this software, please refer to the Patch Module on FORUM.

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## Acknowledgements

The Capacity Planning (CP) Services' Capacity Management (CM) Tools Project Team consists of the following Development and Infrastructure Service (DaIS) personnel:

- DaIS Program Director—Catherine Pfeil
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- Software Quality Assurance (SQA)—Gurbir Singh
- Enterprise VistA Support (EVS) Release Manager—Lewis Tillis
- Technical Writer—Thom Blom

The Capacity Planning Services' CM Tools Project Team would like to thank the following sites/organizations/personnel for their assistance in reviewing and/or testing CM Tools V. 2.0 software and documentation (sites are listed alphabetically):

- CAVHCS—Thomas E. Ash
- Gainesville, FL
- Health Systems Implementation Training and Enterprise Support (HSITES)—Dennis A. Follensbee and Irene LaPerle
- Loma Linda, CA—Diane Newland
- Reno, NV—Kathy Smith
- West Haven, CT

Acknowledgements

#### Orientation

#### How to Use this Manual

Throughout this manual, advice and instructions are offered regarding the use of Capacity Management Tools software and the functionality it provides for Veterans Health Information Systems and Technology Architecture (VistA) software products.

This manual uses several methods to highlight different aspects of the material:

• Various symbols are used throughout the documentation to alert the reader to special information. The following table gives a description of each of these symbols:

Symbol	Description
<b>(i)</b>	Used to inform the reader of general information including references to additional reading material.
A	Used to caution the reader to take special notice of critical information.

Table ii: Documentation symbol descriptions

- Descriptive text is presented in a proportional font (as represented by this font).
- HL7 messages, "snapshots" of computer online displays (i.e., roll-and-scroll screen captures/dialogues) and computer source code, if any, are shown in a *non*-proportional font and enclosed within a box.
  - ➤ User's responses to online prompts will be boldface type.
  - The "**<Enter>**" found within these snapshots indicate that the user should press the Enter key on their keyboard. Other special keys are represented within **<>** angle brackets. For example, pressing the PF1 key can be represented as pressing **<PF1>**.
  - Author's comments, if any, are displayed in italics or as "callout" boxes.
    - Callout boxes refer to labels or descriptions usually enclosed within a box, which point to specific areas of a displayed image.
- All uppercase is reserved for the representation of M code, variable names, or the formal name of options, field and file names, and security keys (e.g., the XUPROGMODE key).

### **How to Obtain Technical Information Online**

Exported file, routine, and global documentation can be generated through the use of Kernel, MailMan, and VA FileMan utilities.



Methods of obtaining specific technical information online will be indicated where applicable under the appropriate topic. Please refer to the *Capacity Management Tools Technical Manual* for further information.

#### **Help at Prompts**

VistA software provides online help and commonly used system default prompts. Users are encouraged to enter question marks at any response prompt. At the end of the help display, the user is immediately returned to the point from which he/she started. This is an easy way to learn about any aspect of VistA software.

To retrieve online documentation in the form of Help in any VistA character-based product:

- Enter a single question mark ("?") at a field/prompt to obtain a brief description. If a field is a pointer, entering one question mark ("?") displays the HELP PROMPT field contents and a list of choices, if the list is short. If the list is long, the user will be asked if the entire list should be displayed. A **YES** response will invoke the display. The display can be given a starting point by prefacing the starting point with an up-arrow ("^") as a response. For example, ^M would start an alphabetic listing at the letter M instead of the letter A while ^127 would start any listing at the 127th entry.
- Enter two question marks ("??") at a field/prompt for a more detailed description. Also, if a field is a pointer, entering two question marks displays the HELP PROMPT field contents and the list of choices.
- Enter three question marks ("???") at a field/prompt to invoke any additional Help text stored in Help Frames.

#### **Obtaining Data Dictionary Listings**

Technical information about files and the fields in files is stored in data dictionaries. You can use the List File Attributes option on the Data Dictionary Utilities submenu in VA FileMan to print formatted data dictionaries.



For details about obtaining data dictionaries and about the formats available, please refer to the "List File Attributes" chapter in the "File Management" section of the *VA FileMan Advanced User Manual*.

## **Assumptions About the Reader**

This manual is written with the assumption that the reader is familiar with the following:

- VistA computing environment
- VA FileMan data structures and terminology
- Microsoft Windows
- M programming language

It provides an overall explanation of configuring the Capacity Management Tools interface and the changes contained in Capacity Management Tools Version 2.0. However, no attempt is made to explain how the overall VistA programming system is integrated and maintained. Such methods and procedures are documented elsewhere. We suggest you look at the various VA home pages on the World Wide Web (WWW) for a general orientation to VistA. For example, go to the Veterans Health Administration (VHA) Office of Information (OI) Health Systems Design & Development (HSD&D) Home Page at the following Web address:

http://vista.med.va.gov/

#### **Reference Materials**

Readers who wish to learn more about the Capacity Management Tools software should consult the following:

- Capacity Management Tools Installation Guide
- Capacity Management Tools Technical Manual
- The Capacity Planning (CP) Services' Home Page at the following Web address:

http://vista.med.va.gov/capman/default.htm

This site contains additional information and documentation.

VistA documentation is made available online in Microsoft Word format and Adobe Acrobat Portable Document Format (PDF). The PDF documents *must* be read using the Adobe Acrobat Reader (i.e., ACROREAD.EXE), which is freely distributed by Adobe Systems Incorporated at the following Web address:

http://www.adobe.com/

VistA documentation can be downloaded from the Enterprise VistA Support (EVS) anonymous directories or from the Health Systems Design and Development (HSD&D) VistA Documentation Library (VDL) Web site:

http://www.va.gov/vdl/



For more information on the use of the Adobe Acrobat Reader, please refer to the *Adobe Acrobat Quick Guide* at the following Web address:

http://vista.med.va.gov/iss/acrobat/index.asp



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Orientation

#### 1. Introduction

The Capacity Management Tools software is intended for use by Information Resource Management (IRM) staff responsible for the capacity planning functions at their site. The CM Tools software allows a site to collect Veterans Health Information Systems and Technology Architecture (VistA) Health Level Seven (HL7) workload information.

The CM Tools software is strongly dependent on the site to schedule and run the background task on a regular basis. Menus and options are provided locally at the site to allow IRM staff to accomplish and monitor this task.

The background task obtains VistA HL7 information from the site and automatically transfers this data via network mail (i.e., VistA MailMan) to the Capacity Planning National Database

The Veterans Health Administration (VHA) developed the CM Tools software in order to obtain more accurate information regarding the current and future system and VistA HL7 workload at VA sites (e.g., VA Medical Centers [VAMCs]).

The purpose of this manual is to provide information about the Capacity Management Tools software. This manual defines the use of this software as a resource to IRM staff responsible for capacity planning functions at the site. It also highlights the use of the options that are available at the site.

Introduction

#### 2. CM Tools: Software Overview and Use

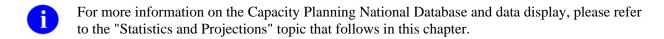
## **Functional Description**

The Capacity Management Tools software application provides fully automated support tools developed by Capacity Planning Services. It entails the daily capture of the following data from participating sites:

- **VistA Health Level Seven (HL7) Workload Information**—VistA HL7 workload data is summarized and transmitted on a weekly basis.
- VistA Timing Data—Timing data is summarized and transmitted on a daily and weekly basis.

Data collected is automatically transferred via network mail (i.e., VistA MailMan) to the Capacity Planning National Database. The data is displayed graphically on the Capacity Planning Statistics Web page located at:

http://vista.med.va.gov/capman/Statistics/Default.htm



The IRM staff utilizes the options that are available at the site to manage the CM Tools software. IRM staff responsible for capacity planning tasks at the site can use these options to review VistA HL7 workload trends.

For more information on the CM Tools options, please refer to Chapter 3 "CM Tools: Options," in this manual.

The current version of the software is compatible with all current operating system platforms at VA sites and has minimal impact on IRM support staff.

#### **Data Collection Process**

Installing the CM Tools software creates the collection process mechanism and other necessary components of the software. The fully automated data collection mechanism entails capturing the following data:

- **VistA HL7 workload specifics at the site**—This data is gathered into a temporary ^TMP("KMPDH",\$J) collection global.
- **Timing data at the site**—This data is gathered into the temporary ^KMPTMP("KMPDT") collection global.

The collection mechanism is continuously monitoring each process on the system while trapping system timing and VistA HL7 workload data.

On a nightly basis, the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] does the following:

- Moves the data within the ^TMP("KMPDH",\$J) collection global to the CM HL7 DATA file (#8973.1).
- Moves the data within the ^KMPTMP("KMPDT") collection global. to the CP TIMING file (#8973.2)

Upon completion, the data within both the 'TMP("KMPDH",\$J) and 'KMPTMP("KMPDT") temporary collection globals is purged.



For more information on the CM Tools Background Driver option [KMPD BACKGROUND DRIVER], please refer to the "CM Tools Background Driver" topic in Chapter 3 "CM Tools: Options," in this manual.

## **Statistics and Projections**

Every Sunday night, the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] monitors and trims (records deleted) the following files to ensure that the correct maximum number of day's data is maintained as determined by the appropriate CP parameters:

- CM HL7 DATA file (#8973.1)—The maximum amount of data collected is determined by the Purge HL7 Data After CP parameter.
- CP TIMING file (#8973.2)—The maximum amount of data collected is determined by the Purge Timing Data After CP parameter.
- For more information on the CP parameters, please refer to the "Edit CP Parameters File" topic in Chapter 3, "CM Tools: Options," in this manual.

On a nightly basis, the CM Tools Background Driver option automatically compresses the information contained within the CP TIMING file (#8973.2) into daily statistics. These daily statistics are converted into an electronic mail message that is automatically transferred via network mail (i.e., VistA MailMan) and merged into a Capacity Planning National Database where this data is used for evaluation purposes.

Also, each Sunday night, the CM Tools Background Driver option automatically compresses the information contained within both the CM HL7 DATA (#8973.1) and CP TIMING (#8973.2) files into weekly statistics. These weekly statistics are converted into an electronic mail message that is automatically transferred via network mail (i.e., VistA MailMan) and merged into a Capacity Planning National Database where this data is used for evaluation purposes.

The data is also available on the Capacity Planning Web site at the following Web addresses:

- Statistics—Provides statistics for each listed site:
   <a href="http://vista.med.va.gov/capman/Statistics/Default.htm">http://vista.med.va.gov/capman/Statistics/Default.htm</a>
- Projections—Provides data trends for each listed site:

http://vista.med.va.gov/capman/TrendSetter/Default.htm

## **Software Management**

The Capacity Management Tools software is managed by IRM staff through the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU], which is located under the Capacity Planning menu [XTCM MAIN]. The XTCM MAIN menu is found under the Eve menu and should be assigned to IRM staff member(s) who support(s) this software and other capacity management tasks.



For more information on CM Tools software management and maintenance, please refer to the *Capacity Management Tools Technical Manual*.

CM Tools: Software Overview and Use

## 3. CM Tools: Options

This chapter discusses the Capacity Management Tools software options.

<b>Capacity Planning</b>	[XTCM MAIN]
(Synonym: CM)	

The Capacity Planning menu [XTCM MAIN] is located under the Operations Management menu [XUSITEMGR], which is located under Kernel's Systems Manager Menu [Eve], as shown below:

```
Select Systems Manager Menu Option: Operations Management
          System Status
          Introductory text edit
          CPU/Service/User/Device Stats
  CM
                                                                          [XTCM MAIN]
         Capacity Planning ....
          Alert Management ...
          Alpha/Beta Test Option Usage Me
          Clean old Job Nodes in XUTL
                                                            The Capacity Planning
          Delete Old (>14 d) Alerts
                                                            menu is accessed via
          Kernel Management Menu ...
                                                            the Operations
          Post sign-in Text Edit
                                                            Management menu.
         RPC Broker Management Menu ...
          User Management Menu ...
Select Operations Management Option: Capacity Planning
```

Figure 3-1: Accessing the Capacity Planning menu—User prompts

The Capacity Planning menu holds all the currently available capacity planning options. The XTCM MAIN menu may be assigned to the IRM staff member(s) who support(s) this software and other capacity planning tasks.

The Capacity Planning menu contains the following options:

```
Select Operations Management Option: Capacity Planning
   CPG
          Capacity Planning Mail Group Edit
                                                               [KMP MAIL GROUP EDIT]
         RUM Manager Menu ...
  RUM
                                                             [KMPR RUM MANAGER MENU]
          CP Tools Manager Menu ...
   TLS
                                                      [KMPD CM TOOLS MANAGER MENU]
          VAX/ALPHA Capacity Management ...
                                                                         [XUCM MAIN]
          Move Host File to Mailman
                                                                    [XTCM DISK2MAIL]
          Response Time Log Menu ...
                                                                           [XURTLM].
Select Capacity Planning Option:
```

Figure 3-2: Capacity Planning—Menu option

The Capacity Planning menu-related options that will be discussed in greater detail in the topics that follow include the following:

- Capacity Planning Mail Group Edit option
- CP Tools Manager Menu and subordinate options



For more information on the RUM Manger Menu [KMPR RUM MANAGER MENU], please refer to the *Resource Usage Monitor (RUM) User Manual*.

For more information on the VAX/ALPHA Capacity Management [XUCM MAIN], Move Host File to Mailman [XTCM DISK2MAIL], and Response Time Log Menu [XURTLM] menus/options, please refer to the *Kernel Toolkit User Manual*.

<b>Capacity Planning Mail Group Edit</b>	[KMP MAIL GROUP EDIT]
(Synonym: <b>CPG</b> )	

The Capacity Planning Mail Group Edit option [KMP MAIL GROUP EDIT] is located on the Capacity Planning menu [XTCM MAIN] (Figure 3-2). It is used to edit the KMP-CAPMAN mail group. The KMP-CAPMAN mail group is defined with the installation of the CM Tools software.

The following example shows the prompts and user responses for the Capacity Planning Mail Group Edit option:

```
Select Capacity Planning Option: Capacity Planning Mail Group Edit
                      Edit Capacity Planning Mail Group
NAME: KMP-CAPMAN
                                             Enter users to the KMP-CAPMAN mail
Select MEMBER: KMPDUSER, ONE // ?
                                             group. These mail group members (e.g.,
    Answer with MEMBER
                                             IRM personnel) will receive messages
   Choose from:
                                             from Capacity Planning-related software
   KMPDUSER, ONE
   KMPDUSER, TWO
                                             (e.g., CM Tools).
        You may enter a new MEMBER, if you wish
        Enter a local user who should receive mail addressed to this group.
        User must have an access code and a mailbox.
 Answer with NEW PERSON NAME, or INITIAL, or SSN, or VERIFY CODE, or
     NICK NAME, or SERVICE/SECTION, or DEA#, or ALIAS
 Do you want the entire NEW PERSON List? n <Enter>
Select MEMBER: KMPDUSER,ONE// <Enter>
  TYPE: CC// ??
        This field indicates what type of recipient this is.
        If this field has nothing in it, it indicates that this recipient is
        a primary recipient, and may reply.
        CC: indicates that the recipient is being sent a copy, but is not the
        primary recipient. The recipient may reply.
        INFO: indicates that the recipient may not reply to the message; the
        message is being transmitted to the recipient for information purposes
        only.
                                          Indicate whether or not
     Choose from:
                                           the mail group member
       C
                INFO
                                           is a primary recipient.
  TYPE: CC// <Enter>
Select MEMBER: <Enter>
DESCRIPTION:
This mail group will receive messages for all Capacity Planning software
(i.e., CM Tools, SAGG, RUM).
  Edit? NO// <Enter>
TYPE: public// ??
        The type of mail group determines who can send mail to it.
        Provided there are no AUTHORIZED SENDERS specified, anyone can send mail
        to a public group and only its members can send mail to a private group.
        If there are AUTHORIZED SENDERS specified, only those users can address
        the group.
                           Choose whether or not
                                                       Choose the mail group
                           the mail group is
                                                       organizer and coordinator. The
     Choose from:
                           public or private.
                                                       coordinator is responsible for
       ΡIJ
                public
                                                       maintaining the membership of
       PR
                private
TYPE: public// <Enter>
                                                       the mail group. Also, enter any
ORGANIZER: KMPDUSER, TWO// <Enter>
                                                       authorized senders.
COORDINATOR: KMPDUSER, TWO// <Enter>
Select AUTHORIZED SENDER: <Enter>
```

```
ALLOW SELF ENROLLMENT?: NO// ?
     If users may join this group by themselves, say "YES"
     Choose from:
      V
                NO
ALLOW SELF ENROLLMENT?: NO// <Enter>
Select MEMBER GROUP NAME: ?
        You may enter a new MEMBER GROUPS, if you wish
        If you would like another mail group to be a member of this one enter
        a partial match to its name.
        A mail group may not be a member of itself.
 Answer with MAIL GROUP NAME
Do you want the entire MAIL GROUP List? n <Enter> (No)
Select MEMBER GROUP NAME: <Enter>
Select REMOTE MEMBER: ?
        You may enter a new MEMBERS - REMOTE, if you wish
        Enter a remote address (name@domain) or local device (D.device or
        H.device) or local server (S.server).
Select REMOTE MEMBER: <Enter>
Select DISTRIBUTION LIST: ?
       You may enter a new DISTRIBUTION LIST, if you wish
   Answer with DISTRIBUTION LIST NAME
   Choose from:
                                              This series of prompts is used to
   486 TEAM
                                              enter any additional remote users,
   G.IMG@RD4.VA.GOV
                                              mail groups, distribution lists, or
   GUESS
   TRM
                                              FAX recipients/groups as members
   IRM
                                              to the KMP-CAPMAN mail group.
   K7 TESTING
   K7.1 DISTRIBUTION
   SHARED
        You may enter a new DISTRIBUTION LIST, if you wish
        NAME MUST BE 3-30 CHARACTERS, NOT NUMERIC OR STARTING WITH
        PUNCTUATION
Select DISTRIBUTION LIST: <Enter>
Select FAX RECIPIENT: ?
        You may enter a new FAX RECIPIENT, if you wish
        Enter the fax recipient who should receive faxes sent to this mail
        group.
 Pointed-to File does not exist!
Select FAX RECIPIENT: <Enter>
Select FAX GROUP: ?
        You may enter a new FAX GROUP, if you wish
        Enter the fax group which should receive faxes sent to this mail
        Group must be public or user must be (surrogate of) creator of group.
Select FAX GROUP: <Enter>
```

Figure 3-3: Capacity Planning Mail Group Edit option—User prompts

<b>CP Tools Manager Menu</b>	[KMPD CM TOOLS MANAGER MENU]
(Synonym: <b>TLS</b> )	

The CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] is located on the Capacity Planning menu [XTCM MAIN] (Figure 3-2). It contains the following options:

```
Select Capacity Planning Option: CP Tools Manager Menu
  STA
          CP Environment Check
                                                                        [KMPD STATUS]
   SST
          Start/Stop Timing Collection
                                                                [KMPD TMG START/STOP]
  PRM
          Edit CP Parameters File
                                                                    [KMPD PARAM EDIT]
  TMT
          Timing Monitor
                                                                   [KMPD TMG MONITOR]
  RPT
          CP Tools Reports ...
                                                              [KMPD CM TOOLS REPORTS]
```

Figure 3-4: CP Tools Manager Menu—Menu option

Each of these options is discussed in greater detail in the topics that follow.

CP Environment Check	[KMPD STATUS]
(Synonym: STA)	

The CP Environment Check option [KMPD STATUS] is located on the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] (Figure 3-4). It allows users to check the capacity planning environment at their site. It displays data from the following areas (see Figure 3-5):

- Health Level Seven (HL7)
- Resource Usage Monitor (RUM)
- Statistical Analysis of Global Growth (SAGG)
- Timing

```
Select CP Tools Manager Menu Option: STA <Enter> CP Environment Check

Check Capacity Planning Environment

Select one of the following:

H HL7
R RUM
S SAGG
T Timing

Enter response:
```

Figure 3-5: CP Environment Check option—User prompts

#### **HL7 Data**

Users can use the CP Environment Check option to display the current status of Health Level Seven (HL7)-related statistics by choosing **HL7** or **H** from the option list, as shown below:

```
Check Capacity Planning Environment

Select one of the following:

H HL7
R RUM
S SAGG
T Timing

Enter response: HL7
```

Figure 3-6: CP Environment Check option: HL7—User prompts

For both the HL7 and Timing options (see Figure 3-7 and Figure 3-19), the CP Environment Check option [KMPD STATUS] displays the following information regarding the scheduled CM Tools Background Driver option [KMPD BACKGROUND DRIVER]:

Data	Description
CM Tools Background Driver	Indicates the name of the CM Tools Background Driver option [KMPD BACKGROUND DRIVER].
QUEUED TO RUN AT	Indicates the date and time that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is scheduled to first run at the site. The job will run at this scheduled time depending on the Rescheduling Frequency indicated.  The installation of the CM Tools software creates
	and sets this field automatically. It does the same thing as TaskMan's Schedule/Unschedule Option, which saves the installer the job of having to set up the CM Tools Background Driver job later.
RESCHEDULING FREQUENCY	Indicates the frequency at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is run (e.g., 1 day).
TASK ID	This is the TaskMan task ID scheduled to run the CM Tools Background Driver option [KMPD BACKGROUND DRIVER].

Data	Description
QUEUED BY	This is the person who schedules the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] to run via TaskMan.
	The installation of the CM Tools software creates and sets this field automatically. It sets it to the name of the person doing the installation of the CM Tools V. 2.0 software.

Table 3-1: CP Environment Check option—CM Tools Background Driver option statistics

If the CP Environment Check option [KMPD STATUS] detects that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] has *not* been scheduled, it will only display the following statement:

The CM Tools Background Driver [KMPD BACKGROUND DRIVER] is not scheduled

This alerts users to schedule the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] to run every day at 1:30 a.m. To schedule this option, use TaskMan's Schedule/Unschedule Options option [XUTM SCHEDULE], which is located under the Taskman Management menu [XUTM MGR].



Capacity Planning Services *strongly* recommends that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] be scheduled to run every day at 1:30 a.m., because this background driver is the main mechanism by which the following sub-globals are purged nightly:

- ^KMPD(8973.1)—CM HL7 DATA file (#8973.1): Records are purged as
  prescribed by the Purge HL7 Data After CP parameter, which is stored in the
  HL7 WEEKS TO KEEP DATA field (#3.11) in the CP PARAMETERS file (#8973).
  This parameter is edited via the Edit CP Parameters File option [KMPD PARAM
  EDIT].
- ^KMPD(8973.2)—CP TIMING file (#8973.2): Records are purged as prescribed by the Purge Timing Data After CP parameter, which is stored in the TIMING WEEKS TO KEEP DATA field (#4.11 in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].

Modification of the frequency and time may have adverse effects on the size of the temporary ^KMPD(8973.1) and ^KMPD(8973.2) sub-globals and on the number of entries within the CM HL7 DATA file (#8973.1) and CP TIMING (#8973.2) files.

In addition to the information regarding the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] (Table 3-1), the CP Environment Check option—HL7 [KMPD STATUS] displays the following HL7-specific report information (see Table 3-2 and Figure 3-7):

Data	Description
HL7 DAILY BACKGROUND LAST START	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last daily run started HL7 data collection.
HL7 DAILY BACKGROUND LAST STOP	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last daily run stopped HL7 data collection.
HL7 DAILY BACKGROUND TOTAL TIME	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] took in its most recent daily run of HL7 data collection.
HL7 WEEKLY BACKGROUND LAST START	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last weekly run started HL7 data collection.
HL7 WEEKLY BACKGROUND LAST STOP	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last weekly run stopped HL7 data collection.
HL7 WEEKLY BACKGROUND TOTAL TIME	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] took in its most recent weekly run of HL7 data collection.
HL7 PURGE DATA AFTER	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] should purge HL7 data in the CM HL7 DATA file (#8973.1) (e.g., 2 weeks).
HL7 TRANSMIT DATA TO	Indicates the mail group(s) to which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] transmits HL7 data.

Table 3-2: CP Environment Check option: HL7—Report data fields

The CP Environment Check option—HL7 [KMPD STATUS] also displays the following additional HL7 information (see Figure 3-8):

- Number of entries within the CM HL7 DATA file (#8973.1). This file is populated when the data collection is started. The report also includes the date range of data in this file from the oldest date to the most recent date.
  - For more information on this file, please refer to the Chapter 3, "Files," in the *Capacity Management Tools Technical Manual*.
- Number of CM TOOLS routines and any problems, if any.
- List of node(s) and CPU data. If sites believe this information is incorrect they should contact the Capacity Planning Team.
- KMP-CAPMAN mail group members. Sites should review this list and adjust membership in this
  mail group as necessary.

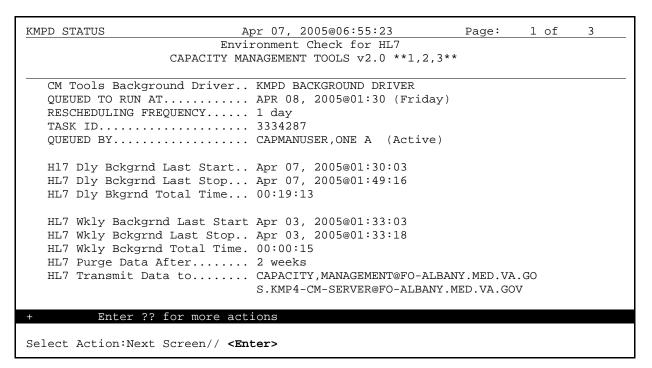


Figure 3-7: CP Environment Check option: HL7—Report (1 of 3)

```
KMPD STATUS
                            Apr 07, 2005@06:56:23
                                                                   2 of
                                                                           3
                                                          Page:
                         Environment Check for HL7
                  CAPACITY MANAGEMENT TOOLS v2.0 **1,2,3**
                                  # of
                                           Oldest
  File
                                 Entries
                                           Date
                                                     Date
                                 _____
                                           _____
                                   4,560
                                           3/20/05
  8973.1 - CM HL7 DATA
                                                    4/6/05
  CM TOOLS routines..... 50 Routines - No Problems
  Node/CPU Data...... 573A01 hp AlphaServer ES80 7/1000 (6)
                              573A02 hp AlphaServer ES80 7/1000 (6)
                              573A03 hp AlphaServer ES80 7/1000 (6)
                              573A04 hp AlphaServer ES80 7/1000 (6)
  KMP-CAPMAN Mail Group..... CAPMANUSER, TWO
                              CAPMANUSER, THREE R
                              CAPMANUSER, FOUR A
                              CAPMANUSER, FIVE E
         Enter ?? for more actions
Select Action: Next Screen// <Enter>
```

Figure 3-8: CP Environment Check option: HL7—Report (2 of 3)

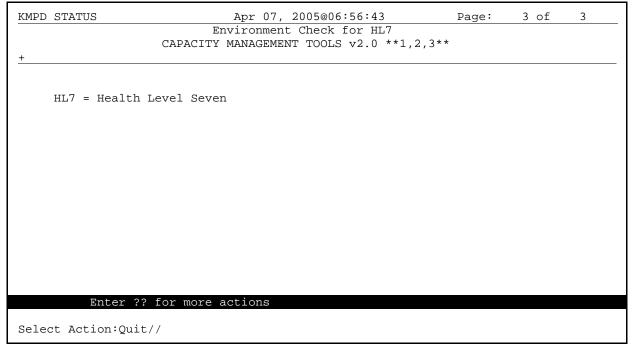


Figure 3-9: CP Environment Check option: HL7—Report (3 of 3)

#### **RUM Data**

Users can use the CP Environment Check option to display the current status of Resource Usage Monitor (RUM)-related statistics by choosing **RUM** or **R** from the option list, as shown below:

```
Check Capacity Planning Environment

Select one of the following:

H HL7
R RUM
S SAGG
T Timing

Enter response: R <Enter> RUM
```

Figure 3-10: CP Environment Check option: RUM—User prompts

The CP Environment Check option—RUM [KMPD STATUS] displays the following information regarding the RUM Background Driver option [KMPR BACKGROUND DRIVER]:

Data	Description
RUM Background Driver	Indicates the name of the RUM Background Driver option [KMPR BACKGROUND DRIVER].
QUEUED TO RUN AT	Indicates the date and time that the RUM Background Driver option [KMPR BACKGROUND DRIVER] is scheduled to first run at the site. The job will run at this scheduled time depending on the Rescheduling Frequency indicated.
	The installation of the RUM software creates and sets this field automatically. It does the same thing as TaskMan's Schedule/Unschedule Option, which saves the installer the job of having to set up the RUM Background Driver job later.
RESCHEDULING FREQUENCY	Indicates the frequency at which the RUM Background Driver option [KMPR BACKGROUND DRIVER] is run (e.g., 1 day).
TASK ID	This is the TaskMan task ID scheduled to run the RUM Background Driver option [KMPR BACKGROUND DRIVER].

Data	Description
QUEUED BY	This is the person who schedules the RUM Background Driver option [KMPR BACKGROUND DRIVER] to run via TaskMan.
	The installation of the RUM software creates and sets this field automatically. It sets it to the name of the person doing the installation of the CM Tools V. 2.0 software.

Table 3-3: CP Environment Check option—RUM Background Driver option statistics

If the CP Environment Check option—RUM [KMPD STATUS] detects that the RUM Background Driver option [KMPR BACKGROUND DRIVER] has *not* been scheduled, it will only display the following statement:

The RUM Background Driver [KMPD BACKGROUND DRIVER] is not scheduled

This alerts users to schedule the RUM Background Driver option [KMPR BACKGROUND DRIVER] to run every day at 1:00 a.m. To schedule this option, use TaskMan's Schedule/Unschedule Options option [XUTM SCHEDULE], which is located under the Taskman Management menu [XUTM MGR].



Capacity Planning (CP) Services strongly recommends that the RUM Background Driver option [KMPR BACKGROUND DRIVER] be scheduled to run every day at 1 a.m., because this background driver is the main mechanism by which the ^KMPTMP("KMPR") temporary collection global is purged nightly and the RESOURCE USAGE MONITOR file (#8971.1) is trimmed (records deleted) to contain a maximum of 21 days of data every Sunday night.

Modification of the frequency and time may have adverse effects on the size of the ^KMPTMP("KMPR") temporary collection global and on the number of entries within the RESOURCE USAGE MONITOR file.



For more information on the RUM software, please consult the RUM documentation located on the VDL at the following Web address:

http://www.va.gov/vdl/Infrastructure.asp?appID=130

In addition to the information regarding the RUM Background Driver option [KMPR BACKGROUND DRIVER] (Table 3-3), the CP Environment Check option—RUM [KMPD STATUS] also displays the following additional RUM information (see Figure 3-12 and Figure 3-13):

- Number of entries within the RESOURCE USAGE MONITOR file (#8971.1). This file is populated when the data collection is started. The report also includes the date range of data in this file from the oldest date to the most recent date.
  - For more information on this file, please refer to the Chapter 3, "Files," in the *Capacity Management Tools Technical Manual*.
- Number of RUM routines and any problems, if any.
- List of node(s) and CPU data. If sites believe this information is incorrect they should contact the Capacity Planning Team.
- KMP-CAPMAN mail group members. Sites should review this list and adjust membership in this
  mail group as necessary.

```
KMPD STATUS
                            Apr 07, 2005@06:57:06
                                                                  1 of
                                                                          3
                                                          Page:
                         Environment Check for RUM
                     CAPACITY MANAGEMENT - RUM v2.0 **1**
  RUM Background Driver..... KMPR BACKGROUND DRIVER
  QUEUED TO RUN AT..... APR 08, 2005@01:31 (Friday)
  RESCHEDULING FREQUENCY..... 1 day
  TASK ID..... 3334332
  QUEUED BY..... CAPMANUSER, TWO (Active)
  Temporary collection global..
  ^KMPTMP("KMPR")..... Present
  RUM Dly Bckgrnd Last Start... Apr 07, 2005@01:31
  RUM Dly Bckgrnd Last Stop.... Apr 07, 2005@01:42:57
  RUM Dly Bkgrnd Total Time.... 00:11:57
  RUM Wkly Backgrnd Last Start. Apr 03, 2005@01:33:56
  RUM Wkly Bckgrnd Last Stop... Apr 03, 2005@01:42:04
  RUM Wkly Bckgrnd Total Time.. 00:08:08
         Enter ?? for more actions
Select Action: Next Screen// <Enter>
```

Figure 3-11: CP Environment Check option: RUM—Report (1 of 3)

```
Apr 07, 2005@06:57:25
KMPD STATUS
                                                          Page:
                                                                  2 of
                                                                          3
                         Environment Check for RUM
                    CAPACITY MANAGEMENT - RUM v2.0 **1**
  RUM Purge Data After..... 2 weeks
  RUM Transmit Data to...... CAPACITY, MANAGEMENT@FO-ALBANY.MED.VA.GO
                               S.KMP2-RUM-SERVER@FO-ALBANY.MED.VA.GOV
                                  # of
                                          Oldest
                                                    Recent
                                 Entries
  File
                                           Date
                                                    Date
                                           -----
  8971.1-RESOURCE USAGE MONITOR
                                 231,257
                                          3/20/05
                                                   4/6/05
  RUM routines...... 17 Routines - No Problems
  Node/CPU Data...... 573A01 hp AlphaServer ES80 7/1000 (6)
                              573A02 hp AlphaServer ES80 7/1000 (6)
                              573A03 hp AlphaServer ES80 7/1000 (6)
                              573A04 hp AlphaServer ES80 7/1000 (6)
         Enter ?? for more actions
Select Action: Next Screen// <Enter>
```

Figure 3-12: CP Environment Check option: RUM—Report (2 of 3)

```
ENVIRONMENT Check for RUM
CAPACITY MANAGEMENT - RUM v2.0 **1**

**

KMP-CAPMAN Mail Group..... CAPMANUSER, TWO
CAPMANUSER, THREE R
CAPMANUSER, FOUR A
CAPMANUSER, FIVE E

RUM = Resource Usage Monitor

Enter ?? for more actions

Select Action:Quit//
```

Figure 3-13: CP Environment Check option: RUM—Report (3 of 3)

#### **SAGG Data**

Users can use the CP Environment Check option to display the current status of Statistical Analysis of Global Growth (SAGG)-related statistics by choosing **SAGG** or **S** from the option list, as shown below:

```
Check Capacity Planning Environment

Select one of the following:

H HL7
R RUM
S SAGG
T Timing

Enter response: S <Enter> SAGG
```

Figure 3-14: CP Environment Check option: SAGG—User prompts

The CP Environment Check option—SAGG [KMPD STATUS] displays the following information regarding the SAGG Master Background Task option [KMPS SAGG REPORT]:

Data	Description
SAGG Master Background Task	Indicates the name of the SAGG Master Background Task option [KMPS SAGG REPORT].
QUEUED TO RUN AT	Indicates the date and time that the SAGG Master Background Task option [KMPS SAGG REPORT] is scheduled to first run at the site. The job will run at this scheduled time depending on the Rescheduling Frequency indicated.
	The installation of the SAGG software creates and sets this field automatically. It does the same thing as TaskMan's Schedule/Unschedule Option, which saves the installer the job of having to set up the SAGG Master Background Task job later.
RESCHEDULING FREQUENCY	Indicates the frequency at which the SAGG Master Background Task option [KMPS SAGG REPORT] is run (e.g., 28 days).
TASK ID	This is the TaskMan task ID scheduled to run the SAGG Master Background Task option [KMPS SAGG REPORT].

Data	Description
QUEUED BY	This is the person who schedules the SAGG Master Background Task option [KMPS SAGG REPORT] to run via TaskMan.
	The installation of the SAGG software creates and sets this field automatically. It sets it to the name of the person doing the installation of the CM Tools V. 2.0 software.

Table 3-4: CP Environment Check option—SAGG Master Background Task option statistics

If the CP Environment Check option—SAGG [KMPD STATUS] detects that the SAGG Master Background Task option [KMPS SAGG REPORT] has *not* been scheduled, it will only display the following statement:

The SAGG Master Background Task [KMPS SAGG REPORT] is not scheduled

This alerts users to schedule the SAGG Master Background Task option [KMPS SAGG REPORT] to run every 28 days on Friday, Saturday, or Sunday. The specific time to run is left up to the site. To schedule this option, use TaskMan's Schedule/Unschedule Options option [XUTM SCHEDULE], which is located under the Taskman Management menu [XUTM MGR].



For more information on the SAGG software, please consult the SAGG documentation located on the VDL at the following Web address:

http://www.va.gov/vdl/Infrastructure.asp?appID=115

In addition to the information regarding the SAGG Master Background Task option [KMPS SAGG REPORT] (Table 3-4), the CP Environment Check option—SAGG [KMPD STATUS] also displays the following additional SAGG information (see Figure 3-15 and Figure 3-16):

- ^XTMP("KMPS") temporary global status (i.e., Present or NOT Present).
- List of VMS disk drives and directories that the SAGG Project collection routines will be monitoring.
- Number of entries within the SAGG PROJECT file (#8970.1). This file is populated when the data collection is started.
  - For more information on this file, please refer to the Chapter 3, "Files," in the *Capacity Management Tools Technical Manual*.
- Number of SAGG routines and any problems, if any.
- List of node(s) and CPU data. If sites believe this information is incorrect they should contact the Capacity Planning Team.
- KMP-CAPMAN mail group members. Sites should review this list and adjust membership in this mail group as necessary.

```
KMPD STATUS
                           Apr 07, 2005@06:57:59
                                                        Page:
                                                                1 of
                                                                        3
                         Environment Check for SAGG
                        SAGG PROJECT v1.8 **1,2,3**
  Current Status..... SCHEDULED
  SAGG Master Background Task. KMPS SAGG REPORT
  QUEUED TO RUN AT..... APR 15, 2005@21:00 (Friday)
  RESCHEDULING FREQUENCY..... 28 days
  TASK ID..... 9201441
  QUEUED BY..... CAPMANUSER, TWO (Active)
  Temporary collection global.
  ^XTMP("KMPS")..... NOT Present
  SAGG Project collection routines will monitor the following:
                                      _$1$DGA101:[NFL.VCC]
         _$1$DGA101:[NFL.ROU]
         _$1$DGA101:[NFL.VDD]
                                      _$1$DGA101:[NFL.ZSHARE]
                                      _$1$DGA102:[NFL.VHH]
         _$1$DGA102:[NFL.VAA]
          $1$DGA103:[NFL.VEE]
                                       $1$DGA103:[NFL.VFF]
         Enter ?? for more actions
Select Action: Next Screen// <Enter>
```

Figure 3-15: CP Environment Check option: SAGG—Report (1 of 3)

```
KMPD STATUS
                          Apr 07, 2005@06:58:15
                                                     Page:
                                                             2 of
                                                                    3
                       Environment Check for SAGG
                      SAGG PROJECT v1.8 **1,2,3**
        _$1$DGA104:[NFL.VBB]
                                   _$1$DGA104:[NFL.VII]
                               # of
  File
                              Entries
  8970.1-SAGG PROJECT
  SAGG routines..... 7 Routines - No Problems
  Node/CPU Data...... 573A01 hp AlphaServer ES80 7/1000 (6)
                           573A02 hp AlphaServer ES80 7/1000 (6)
                           573A03 hp AlphaServer ES80 7/1000 (6)
                           573A04 hp AlphaServer ES80 7/1000 (6)
  KMP-CAPMAN Mail Group..... CAPMANUSER, TWO
        Enter ?? for more actions
Select Action: Next Screen// <Enter>
```

Figure 3-16: CP Environment Check option: SAGG—Report (2 of 3)

```
Enter ?? for more actions

Apr 07, 2005@06:58:29

Environment Check for SAGG
SAGG PROJECT v1.8 **1,2,3**

CAPMANUSER, THREE R
CAPMANUSER, FOUR A
CAPMANUSER, FIVE E

SAGG = Statistical Analysis of Global Growth

Enter ?? for more actions

Select Action:Quit//
```

Figure 3-17: CP Environment Check option: SAGG—Report (3 of 3)

# **Timing Data**

Users can use the CP Environment Check option to display the current status of Timing-related statistics by choosing **Timing** or **T** from the option list, as shown below:

```
Check Capacity Planning Environment

Select one of the following:

H HL7
R RUM
S SAGG
T Timing

Enter response: Timing
```

Figure 3-18: CP Environment Check option: Timing—User prompts

For both the HL7 and Timing options (see Figure 3-7 and Figure 3-19), the CP Environment Check option [KMPD STATUS] displays statistical information regarding the CM Tools Background Driver option [KMPD BACKGROUND DRIVER], see Table 3-1.

In addition to the information regarding the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] (Table 3-1), the CP Environment Check option—Timing [KMPD STATUS] displays the following Timing-specific report information (see Table 3-5 and Figure 3-19):

Data	Description
TIMING COLLECTION STATUS	Indicates whether or not the timing data is being collected (e.g., Running).
TIMING DAILY BACKGROUND LAST START	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last daily run started Timing data collection.
TIMING DAILY BACKGROUND LAST STOP	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last daily run stopped Timing data collection.
TIMING DAILY BACKGROUND TOTAL TIME	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] took in its most recent daily run of Timing data collection.
TIMING PURGE DATA AFTER	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] should purge Timing data in the CP TIMING file (#8973.2) (e.g., 4 weeks).
TIMING TRANSMIT DATA TO	Indicates the mail group(s) to which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] transmits timing data.

Table 3-5: CP Environment Check option: Timing—Report data fields

The CP Environment Check option—Timing [KMPD STATUS] also displays the following additional system timing information (see Figure 3-19 and Figure 3-20):

- Number of entries within the CP TIMING file (#8973.2). This file is populated when the data collection is started. The report also includes the date range of data in this file from the oldest date to the most recent date.
  - For more information on this file, please refer to the Chapter 3, "Files," in the *Capacity Management Tools Technical Manual*.
- Number of SAGG routines and any problems, if any.
- List of node(s) and CPU data. If sites believe this information is incorrect they should contact the Capacity Planning Team.

• KMP-CAPMAN mail group members. Sites should review this list and adjust membership in this mail group as necessary.

```
Check Capacity Planning Environment
    Select one of the following:
                  HL7
         Η
         R
                  RUM
         S
                  SAGG
         Т
                  Timing
Enter response: Timing
                           Apr 07, 2005@06:58:46
KMPD STATUS
                        Environment Check for Timing
                  CAPACITY MANAGEMENT TOOLS v2.0 **1,2,3**
  CM Tools Background Driver.. KMPD BACKGROUND DRIVER
  QUEUED TO RUN AT..... APR 08, 2005@01:30 (Friday)
  RESCHEDULING FREQUENCY..... 1 day
  QUEUED BY..... CAPMANUSER, ONE A (Active)
  TMG Collection Status..... Running
  TMG Dly Bckgrnd Last Start.. Apr 07, 2005@01:49:16
  TMG Dly Bckgrnd Last Stop... Apr 07, 2005@01:52:57
  TMG Dly Bkgrnd Total Time... 00:03:41
  TMG Purge Data After..... 4 weeks
  TMG Transmit Data to...... CAPACITY, MANAGEMENT@FO-ALBANY.MED.VA.GO
                             S.KMP6-TIMING-SERVER@FO-ALBANY.MED.VA.GOV
                                 # of
                                          Oldest
                                                    Recent
  File
                                Entries
                                          Date
                                                    Date
         Enter ?? for more actions
Select Action:Next Screen// <Enter>
```

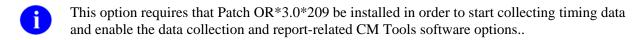
Figure 3-19: CP Environment Check option: Timing—User prompts and report (1 of 2)

```
KMPD STATUS
                             Apr 07, 2005@06:59:06
                                                                     2 of
                                                                             2
                                                            Page:
                         Environment Check for Timing
                   CAPACITY MANAGEMENT TOOLS v2.0 **1,2,3**
   8973.2 - CP TIMING
                                  686,245
                                            3/6/05
                                                      4/6/05
  CM TOOLS routines..... 50 Routines - No Problems
  Node/CPU Data..... 573A01
                                       hp AlphaServer ES80 7/1000 (6)
                               573A02
                                       hp AlphaServer ES80 7/1000 (6)
                               573A03
                                       hp AlphaServer ES80 7/1000 (6)
                               573A04 hp AlphaServer ES80 7/1000 (6)
  KMP-CAPMAN Mail Group..... CAPMANUSER, TWO
                               CAPMANUSER, THREE R
                               CAPMANUSER, FOUR A
                               CAPMANUSER, FIVE E
    TMG = Timing Data
         Enter ?? for more actions
Select Action:Quit//
```

Figure 3-20: CP Environment Check option: Timing—Report (2 of 2)

<b>Start/Stop Timing Collection</b>	[KMPD TMG START/STOP]
(Synonym: SST)	

The Start/Stop Timing Collection option [KMPD TMG START/STOP] is located under the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU]. It is used to start/stop the CM Tools collection routines to start/stop collecting VistA HL7 workload data.



Users should first invoke the CP Environment Check option [KMPD STATUS] to ensure that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is scheduled to run every day at 1:30 a.m.

For more information on the CP Environment Check option, please refer to the "CP Environment Check" topic in this chapter.

If the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is *not* shown as being scheduled to run in the future, use TaskMan's Schedule/Unschedule Options option [XUTM SCHEDULE], located under the Taskman Management menu [XUTM MGR], to schedule the KMPD BACKGROUND DRIVER option to run every day at 1:30 a.m.)



Capacity Planning Services *strongly* recommends that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] be scheduled to run every day at 1:30 a.m., because this background driver is the main mechanism by which the following sub-globals are purged nightly:

- ^KMPD(8973.1)—CM HL7 DATA file (#8973.1): Records are purged as prescribed by the Purge HL7 Data After CP parameter, which is stored in the HL7 WEEKS TO KEEP DATA field (#3.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].
- ^KMPD(8973.2)—CP TIMING file (#8973.2): Records are purged as prescribed by the Purge Timing Data After CP parameter, which is stored in the TIMING WEEKS TO KEEP DATA field (#4.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].

Modification of the frequency and time may have adverse effects on the size of the temporary ^KMPD(8973.1) and ^KMPD(8973.2) sub-globals and on the number of entries within the CM HL7 DATA file (#8973.1) and CP TIMING (#8973.2) files.

### **Starting:**

To start the CM Tools collection, do the following:

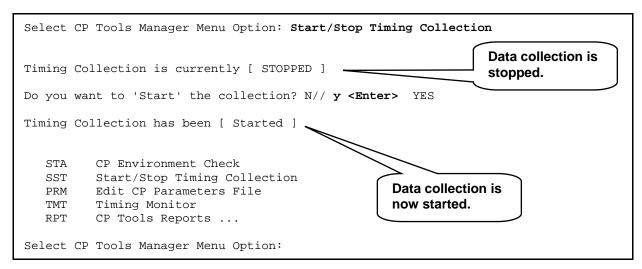


Figure 3-21: Starting timing collection—User prompts

# **Stopping:**

To stop the CM Tools collection, do the following:

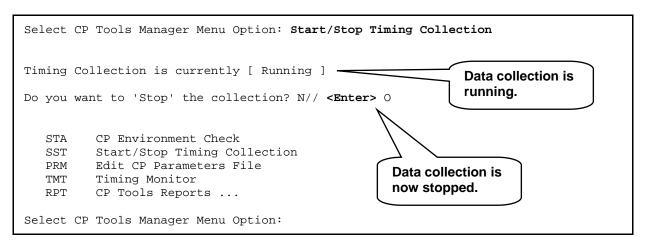


Figure 3-22: Stopping timing collection—User prompts

<b>Edit CP Parameters File</b>	[KMPD PARAM EDIT]
(Synonym: <b>PRM</b> )	

The Edit CP Parameters File option [KMPD PARAM EDIT] is located on the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] (Figure 3-4). It allows editing of the Capacity Planning (CP) parameters in the CP PARAMETERS file (#8973).



For more information on the CP Environment Check option, please refer to the "CP Environment Check" topic in this chapter.

This option allows users to edit the following parameters:

Parameter	Field Name (Number) (in File #8973)	Description
Purge HL7 Data After	HL7 WEEKS TO KEEP DATA field (#3.11)	This is the number of weeks that HL7 data will be retained in the CM HL7 DATA file (#8973.1) before purging. Enter a whole number between 2 and 19 (i.e., 2 weeks minimum and 19 weeks maximum). However, it is recommended that 2 weeks of data be retained.
Purge Timing Data After	TIMING WEEKS TO KEEP DATA field (#4.11)	This is the number of weeks that Timing data will be retained in the CP TIMING file (#8973.2) before purging. Enter a whole number between 2 and 40 (i.e., 2 weeks minimum and 40 weeks maximum). However, it is recommended that 4 weeks of data be retained.

Parameter	Field Name (Number) (in File #8973)	Description
Purge RUM Data After	RUM WEEKS TO KEEP DATA field (#2.11)	This is the number of weeks that RUM data will be retained in the RESOURCE USAGE MONITOR file (#8971.1)) before purging. Enter a whole number between 2 and 20 (i.e., 2 weeks minimum and 20 weeks maximum). However, it is recommended that 2 weeks of data be retained.
Timing Monitor Alert - Seconds	MONITOR ALERT - SECONDS field (#19.02)	When the Timing Monitor is running, if the average time-to-load a CPRS Coversheet exceeds this value, an alert will appear on the Timing Monitor screen. Enter a whole number between 10 and 999.
Timing Monitor Update Rate - Min	MONITOR UPDATE RATE - MINUTES field (#19.01)	When the Timing Monitor is running, this is the number of minutes between automatic updates. Enter a whole number between 5 and 60.

Table 3-6: CP parameters/fields, stored in the CP PARAMETERS file (#8973)

The following examples (see Figure 3-23, Figure 3-24, and Figure 3-25) show the prompts and user responses for the Edit CP Parameters File option:

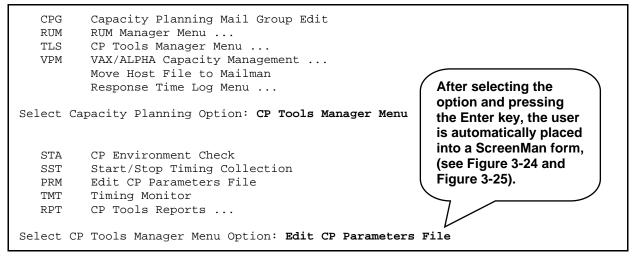


Figure 3-23: Running the Edit CP Parameters option—User prompts

After selecting the Edit CP Parameters File option, the user is automatically placed into the following ScreenMan form:

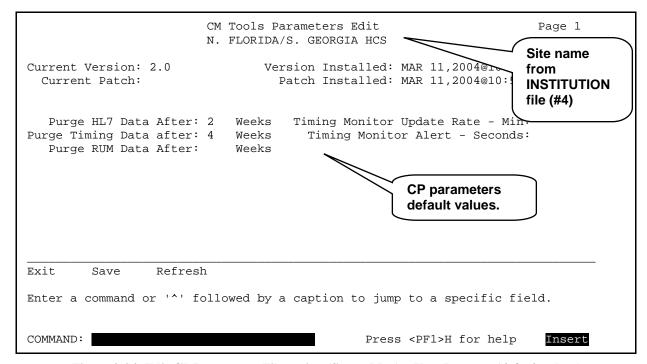


Figure 3-24: Edit CP Parameters File option (ScreenMan)—User Prompts (default values)

The following figure shows the parameters after the user has entered new values:

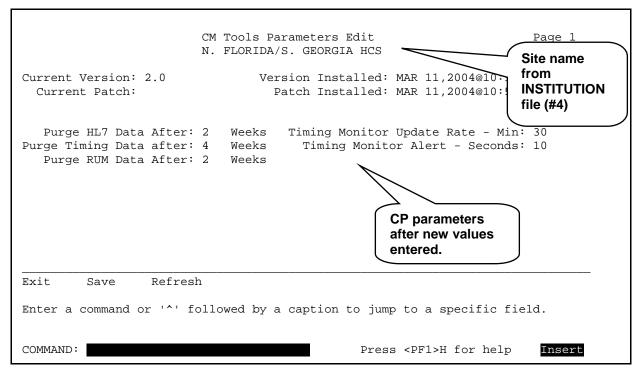


Figure 3-25: Edit CP Parameters File option (ScreenMan)—User Prompts (updated values)

In this example (Figure 3-25), the user has made entries for each parameter. In most cases, the recommended value was entered (see Table 3-6). Specifically, the user made the following entries:

- Purge HL7 Data After: 2 weeks (default)
- Purge Timing Data after: 4 weeks (default)
- Purge RUM Data After: 2 weeks (recommended)
- Timing Monitor Update Rate Min: 30
- Timing Monitor Alert Seconds: 10

After making the entries, the user saved and exited the screen.

Timing Monitor	[KMPD TMG MONITOR]
(Synonym: <b>TMT</b> )	

The Timing Monitor option [KMPD TMG MONITOR] is located on the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] (Figure 3-4). This option updates itself automatically and displays the average number of seconds it takes Computerized Patient record System (CPRS) coversheets to load in a period of time. Data is displayed in a bar graph. The x-axis of the bar graph indicates the hours of the day (from 0 up to 24) and the y-axis indicates the average number of seconds it takes to load CPRS coversheets. This option can be left running on a terminal continuously collecting data.

The Timing Monitor displays data for each hour of the day and each new hour as it comes up (i.e., 0-24 hours). It updates the data according to the value in the MONITOR UPDATE RATE - MINUTES field (#19.01) in the CP PARAMETERS file (#8973). If there is no entry in Field #19.01, the default is every 10 minutes. The CPRS coversheet load data is displayed in a bar graph for each hour the Timing Monitor is running. If the Timing Monitor is run continuously, the cycle repeats every 24 hours overlaying/replacing previous data and adjusting the bar graph accordingly. The bar graph is also adjusted for the latest information gathered based on the value in the MONITOR UPDATE RATE - MINUTES field (#19.01) in the CP PARAMETERS file (#8973).

The Timing Monitor also displays an Alert Message near the bottom of the screen if the average number of seconds to load a CPRS coversheet exceeds the value of the MONITOR ALERT - SECONDS field (#19.02) in the CP PARAMETERS file (#8973). If there is no entry in Field #19.02, the default is 30 seconds. Both of these parameters can be edited using the Edit CP Parameters File option [KMPD PARAM EDIT].

```
STA CP Environment Check
SST Start/Stop Timing Collection
PRM Edit CP Parameters File
TMT Timing Monitor
RPT CP Tools Reports ...

Select CP Tools Manager Menu Option: tmt <Enter> Timing Monitor

Timing Data Monitor

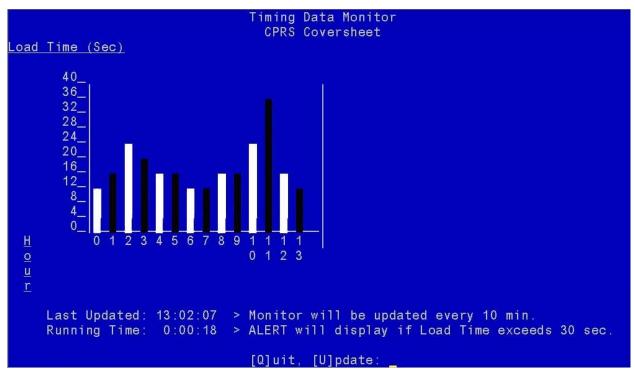
*** There is currently no data in global ^KMPKMPUTMP("KMPDT", "ORWCV") ***
```

Figure 3-26: Running the Timing Monitor option—User prompts and report, no data

# This option displays CPRS Coversheet time-to-load data, as a bar graph, for the current day. This option can be left running on a terminal (if desired). The monitor is updated every 10 minutes (site configurable through the [KMPD PARAM EDIT] Edit CP Parameters File option), and displays current average time-to-load data starting at midnight. An alarm message is displayed if the average time-to-load exceeds 30 seconds (site configurable through the [KMPD PARAM EDIT] Edit CP Parameters File option). Continue? YES// <Enter> Compiling timing stats......

Figure 3-27: Running the Timing Monitor option—User prompts, with data

The following figure (Figure 3-28) shows a snapshot in time of average CPRS coversheet loads at a site over a 13-hour time span. The data is displayed in a bar graph format (bar graph colors have been enhanced for clarity in the display):



**Figure 3-28: Running the Timing Monitor option—Report,** *no* **alert** (bar graph colors have been enhanced for display purposes only)

In this example (Figure 3-28), the Timing Monitor option has been running for 13+ hours at a site. Thus, the sample graph displays the average CPRS coversheet loads from midnight (0 hour) to 1:00 p.m. (13 hour). If the Timing Monitor is left running, eventually a full 24-hour range of data would be displayed.

For this example, the site has set the Timing Monitor Alert - Seconds parameter (i.e., MONITOR ALERT - SECONDS field [#19.02] in the CP PARAMETERS file [#8973]) to 30 seconds. The graph shows that the average CPRS coversheet loads did not exceed the 30 second threshold except at the 11<sup>th</sup> hour. During the 11<sup>th</sup> hour the average CPRS coversheet load was approximately 36 seconds. If the user had checked the monitor at the 11<sup>th</sup> hour he/she would have gotten an alert message displayed at the bottom of the screen.



For an example of an alert message due to coversheet loads exceeding the Timing Monitor Alert - Seconds parameter, please refer to Figure 3-29.

Sites can set the Timing Monitor Alert - Seconds parameter from 10 to 999 seconds via the MONITOR ALERT - SECONDS field (#19.02) in the CP PARAMETERS file (#8973).

To quit/stop the Timing Monitor, enter a "Q" after the "[Q]uit [U]pdate" prompt. To refresh the data/bar graph, enter a "U" after the "[Q]uit [U]pdate" prompt.

a

For more information on the CP parameters, please refer to the "Edit CP Parameters File" topic and Table 3-6 in this chapter.

The following example shows a sample report with an alert message displayed:

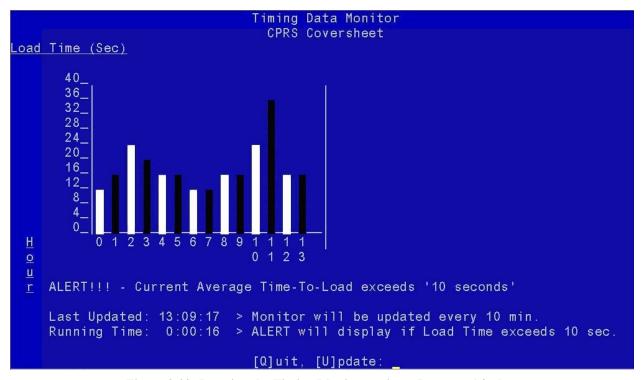


Figure 3-29: Running the Timing Monitor option—Report, with alert

In this example (Figure 3-29), the Timing Monitor option has been running for 13+ hours at a site. Thus, the sample graph displays the average CPRS coversheet loads from midnight (0 hour) to 1:00 p.m. (13 hour).

For this example, the site has set the Timing Monitor Alert - Seconds parameter (i.e., MONITOR ALERT - SECONDS field [#19.02] in the CP PARAMETERS file [#8973]) to 10 seconds. The graph shows that the average CPRS coversheet loads exceeded the 10 second threshold during the 1<sup>st</sup> through the 13<sup>th</sup> hour. Since the user is checking the monitor at the 13<sup>th</sup> hour, where the CPRS coversheet load took approximately 15 seconds, he/she saw the alert message displayed at the bottom of the screen:

ALERT!!! – Current Average Time-To-Load exceeds '10 seconds'

Sites can set the Timing Monitor Alert - Seconds parameter from 10 to 999 seconds via the MONITOR ALERT - SECONDS field (#19.02) in the CP PARAMETERS file (#8973).



For more information on the CP parameters, please refer to the "Edit CP Parameters File" topic and Table 3-6 in this chapter.

<b>CP Tools Reports</b>	[KMPD CM TOOLS REPORTS]
(Synonym: <b>RPT</b> )	

The CP Tools Reports menu [KMPD CM TOOLS REPORTS] is available on the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU], as shown below:

```
Select CP Tools Manager Menu Option: CP Tools Reports

TMG Timing Reports ...

Select CP Tools Reports Option:
```

Figure 3-30: Accessing the CP Tools Reports—Menu option

The CP Tools Reports menu [KMPD CM TOOLS REPORTS] contains a report option that generates report information for a variety of Computerized Patient Record System (CPRS) event statistics accumulated within the CP TIMING file (#8973.2).

The CP Tools Reports menu contains the following sub-menu option:

```
TMG Timing Reports ... [KMPD TMG REPORTS]
```

Figure 3-31: CP Tools Reports—Menu option

This sub-menu option is discussed in greater detail in the topic that follows.

Timing Reports	[KMPD TMG REPORTS]
(Synonym: <b>TMG</b> )	

The Timing Reports menu [KMPD TMG REPORTS] is located under the CP Tools Reports menu [KMPD CM TOOLS REPORTS]. It contains the following report options:

```
Select CP Tools Reports Option: Timing Reports
  AVD
         Average Daily Coversheet Load
                                                                [KMPD TMG AVG TTL]
  AVH
         Average Hourly Coversheet Load
                                                               [KMPD TMG HRLY TTL]
  DTD Detailed Daily Coversheet Load
                                                         [KMPD TMG DLY TTL DETAIL]
         Detailed Hourly Coversheet Load
                                                        [KMPD TMG HRLY TTL DETAIL]
  DTH
  TAL
         Threshold Alert
                                                              [KMPD TMG TTL ALERT]
  RTA
         Real-Time Threshold Alert
                                                           [KMPD TMG TTL ALERT RT]
         Real-Time Average Hourly Coversheet Load
                                                            [KMPD TMG HRLY TTL RT]
Select Timing Reports Option:
```

Figure 3-32: Timing Reports—Menu option

The options on this menu generate report information for a variety of Computerized Patient Record System (CPRS) event statistics accumulated within the CP TIMING file (#8973.2). These options report on the CPRS coversheet load times, which is the main CPRS page. This main page is a screen of the CPRS patient chart that displays an overview of the patient's record.

Each of these options is discussed in greater detail in the topics that follow.

Average Daily Coversheet Load	[KMPD TMG AVG TTL]
(Synonym: AVD)	

The Average Daily Coversheet Load option [KMPD TMG AVG TTL] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the daily average time-to-load value for the coversheet at a site. Average time-to-load values are given for either daily prime time or non-prime time periods.

The following example shows the prompts and user responses for the Average Daily Coversheet Load option:

```
Select Timing Reports Option: Average Daily Coversheet Load
              Average Coversheet Time-to-Load (TTL) Report
       This report displays the daily average time-to-load value for
       the coversheet at this site. Average time-to-load values are
       given for either daily prime time or non-prime time periods.
Select End Date: (9/20/2003 - 10/19/2003): Oct 19, 2003// <Enter> (OCT 19, 2003)
Select # of Days Review: (1-30): 7// <Enter>
     Select one of the following:
                                               Here the user chose the end date and
                                               number of days data upon which to
                    Prime Time
                                               report up to that end date.
                    Non-Prime Time
Select Time Frame: 1// <Enter> Prime Time
Device: HOME// <Enter> TELNET DEVICE
                                             Prime time is 8 a.m. to 5 p.m. Monday
                                             through Friday, excluding holidays.
Compiling timing stats.....
                                             Non-prime time hours are all other hours
. . . . . . . . . . . . . . .
                                             (i.e., weekends, nights and holidays).
```

Figure 3-33: Average Daily Coversheet Load option—User prompts

The following example shows the actual report generated from the Average Daily Coversheet Load option:

	Average	Prin	ime-to-Load (T me Time - Oct 19, 200	TL) Report 3 Printed:	10/20/03
Date	ı	Seconds Minimum TTL	l l	# of CV Loads	
10/13/03	 0	0	0	 0	
10/14/03	14	3	500	16,465	
10/15/03	14	3	615	· · · · · · · · · · · · · · · · · · ·	
10/16/03	14	3	288	18,123	
10/17/03	12	3	436	16,955	
10/18/03	0	0	0	0	
10/19/03	0	0	0	0	
	Incomplete:	0			
CV = Cor TTL = Tin	versheet me-to-Load				
Press RETU	RN to continue:				

Figure 3-34: Average Daily Coversheet Load option—Report

This report provides the following data regarding coversheet loads at a site for a specified number of days:

- Date—Specific day that the coversheet load began.
- Average TTL—Average time-to-load (in seconds) for each day.
- Minimum TTL—Minimum time-to-load (in seconds) for each day.
- Maximum TTL—Maximum time-to-load (in seconds) for each day.
- # of CV Loads—Total number of coversheet loads for each day.
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

Sites can use this report to track average coversheet load times. It also indicates the shortest and longest coversheets time-to-load. If some of the longer load times are extreme, sites can run any of the other Timing Report options to find out more specific information. For example, sites can then run the Detailed Hourly Coversheet Load report option [KMPD TMG HRLY TTL DETAIL] to see how many loads were over 90 seconds, etc, and also run the Threshold Alert report option [KMPD TMG TTL ALERT] to get a breakdown of which user/client/IP address had slow times.



For more information on the Detailed Hourly Coversheet Load report option [KMPD TMG HRLY TTL DETAIL], please refer to the "Detailed Hourly Coversheet Load" topic in this chapter.

For more information on the Threshold Alert report option [KMPD TMG TTL ALERT], please refer to the "Threshold Alert" topic in this chapter.

For this report, the user chose to report on the last 7 days of coversheet load data from 10/13/03 to 10/19/03. From the report, on 10/15/03, for example, there were a total of 18,674 coversheets loaded with an average time-to-load for each coversheet of 14 seconds. On that same day the shortest coversheet time-to-load took only 3 seconds and the longest coversheet time-to-load took 615 seconds (10 minutes and 15 seconds). Zeroes under the "Average TTL," "Minimum TTL," "Maximum TTL," and "# of CV Loads" columns indicates that the coversheets took less than one second to load (see report data for 10/13/03, 10/18/03, and 10/;19/03).

Average Hourly Coversheet Load	[KMPD TMG HRLY TTL]
(Synonym: AVH)	

The Average Hourly Coversheet Load option [KMPD TMG HRLY TTL] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the hourly average time-to-load value for the coversheet at a site over a 24-hour period.

The following example shows the prompts and user responses for the Average Hourly Coversheet Load option:

```
Select Timing Reports Option: Average Hourly Coversheet Load

Hourly Coversheet Time-to-Load (TTL) Report

This report displays the hourly average time-to-load value for the coversheet at this site over 24 hours.

Select End Date: (9/20/2003 - 10/19/2003): Oct 19, 2003// <Enter> (OCT 19, 2003)
Select # of Days Review: (1-30): 1// <Enter>
Device: HOME// <Enter> TELNET DEVICE
Compiling timing stats.....

Here the user chose the end date and number of days data upon which to report hourly up to that end date.
```

Figure 3-35: Average Hourly Coversheet Load option—User prompts

The following example shows the actual report generated from the Average Hourly Coversheet Load option:

		Hourly Coversho Oct 19			Printed: 10/20/03
			Seconds		
Date	Hour	TTL Average	TTL Minimum	TTL Maximum	# of CV Loads
10/19/03	00	14	6	79	52
	01	16	5	83	90
	02	16	5	100	131
	03	10	5	39	69
	04	26	5	150	77
	05	14	5	86	98
	06	13	5	65	77
	07	11	5	44	134
	08	10	4	42	167
	09	9	4	55	161
	10	10	4	53	
			5		254
	11	10		69	225
	12	11	4	166	210
	13	9	4	43	203
	14	12	4	59	245
Enter RETU		ntinue or '^' Hourly Coversho	eet Time-to-Loa	ad (TTL) Repor	
Enter RETU		Hourly Coversho	eet Time-to-Loa , 2003 - Oct 19	ad (TTL) Repor 9, 2003	Printed: 10/20/03
		Hourly Coversho Oct 19   TTL Average	eet Time-to-Loa , 2003 - Oct 19	ad (TTL) Repor 9, 2003	
		Hourly Coversho Oct 19   TTL Average	eet Time-to-Loa , 2003 - Oct 19 Seconds TTL Minimum	ad (TTL) Repor 9, 2003	Printed: 10/20/03
	Hour	Hourly Coversho Oct 19   TTL Average	eet Time-to-Loa , 2003 - Oct 19 Seconds TTL Minimum	ad (TTL) Repor 9, 2003   TTL Maximum	Printed: 10/20/03  # of CV Loads
	Hour 15	Hourly Coversho Oct 19   TTL Average 	eet Time-to-Loa , 2003 - Oct 19 Seconds TTL Minimum 4	ad (TTL) Repor 0, 2003   TTL Maximum 60	# of CV Loads
	Hour  15 16	Hourly Coversho	eet Time-to-Loa, 2003 - Oct 19	ad (TTL) Repor 9, 2003   TTL Maximum 60 38	# of CV Loads
	Hour  15 16 17	Hourly Coversho	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum	ad (TTL) Repor 9, 2003   TTL Maximum 60 38 67	# of CV Loads
	Hour 15 16 17 18 19	Hourly Coversho	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum	ad (TTL) Repor 9, 2003   TTL Maximum 60 38 67 64	# of CV Loads
	Hour  15 16 17 18 19 20	Hourly Coversho Oct 19    TTL Average 11 11 10 12 11 11	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum	ad (TTL) Repor 9, 2003   TTL Maximum 60 38 67 64 58 43	# of CV Loads
	Hour  15 16 17 18 19 20 21	Hourly Coversho Oct 19    TTL Average	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum	ad (TTL) Repor 9, 2003 	# of CV Loads
	Hour  15 16 17 18 19 20 21 22	Hourly Coversho Oct 19    TTL Average	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum	ad (TTL) Repor 9, 2003 	# of CV Loads
	Hour  15 16 17 18 19 20 21	Hourly Coversho Oct 19    TTL Average	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum	ad (TTL) Repor 9, 2003 	# of CV Loads
Enter RETU	Hour  15 16 17 18 19 20 21 22	Hourly Coversho Oct 19    TTL Average	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum	ad (TTL) Repor 9, 2003 	# of CV Loads
	Hour  15 16 17 18 19 20 21 22	Hourly Coversho Oct 19    TTL Average	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum  4 5 5 4 5 5 5 5 5	ad (TTL) Report  2, 2003  TTL Maximum  60 38 67 64 58 43 72 58 58	# of CV Loads
Date  CV = Cc	Hour  15 16 17 18 19 20 21 22 23	Hourly Covershood Oct 19	eet Time-to-Loa, 2003 - Oct 19Seconds TTL Minimum	ad (TTL) Report  9, 2003  TTL Maximum  60 38 67 64 58 43 72 58 58	# of CV Loads  213 137 217 172 154 112 139 94 132 3,563

Figure 3-36: Average Hourly Coversheet Load option—Report

This report provides the following data regarding coversheet loads at a site for each hour of the specified number of day(s):

- Date—Specific day that the coversheet load began.
- Hour—Specific hour that the coversheet load began (00 23).
- TTL Average—Average time-to-load (in seconds) for each hour of a day.
- TTL Minimum—Minimum time-to-load (in seconds) for each hour of a day.
- TTL Maximum—Maximum time-to-load (in seconds) for each hour of a day.
- # of CV Loads—Total number of coversheet loads for:
  - Each hour of the day.
  - > Grand total for the entire day.
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

This report allows sites to identify times of the day when the most coversheet loads are taking place, and when the longest times to load are taking place. Sites can run any of the other Timing Report options to find out more specific information.

For this report, the user chose to report on 24 hours of coversheet load data for a single day, 10/19/03. From the report, at 12:00 p.m. to 12:59 p.m. on 10/19/03, for example, there were a total of 210 coversheets loaded with an average time-to-load for each coversheet of 11 seconds. At that same hour the shortest coversheet time-to-load took only 4 seconds and the longest coversheet time-to-load took 166 seconds (2 minutes and 46 seconds).

<b>Detailed Daily Coversheet Load</b>	[KMPD TMG DLY TTL DETAIL]
(Synonym: <b>DTD</b> )	

The Detailed Daily Coversheet Load option [KMPD TMG DLY TTL DETAIL] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the daily time-to-load values for the coversheet at a site. The report breaks the time-to-load metrics into ten second groupings.

The following example shows the prompts and user responses for the Detailed Daily Coversheet Load option:

```
Select Timing Reports Option: Detailed Daily Coversheet Load
           Daily Coversheet Time-to-Load (TTL) Detailed Report
       This detailed report displays daily time-to-load values for the
       coversheet at this site. The report breaks the time-to-load
       metrics into ten second groupings.
Select End Date: (9/20/2003 - 10/19/2003): Oct 19, 2003// T-3 <Enter>
Select # of Days Review: (1-28): 1// <Enter>
     Select one of the following:
                                               Here the user chose the end date
                                               and number of days data upon which
          1
                    Prime Time
                                               to report up to that end date.
                    Non-Prime Time
                                               However, since the user chose to
                                               start a few days back (T-3), the
Select Time Frame: 1// <Enter> Prime Time
                                               maximum number of day's data
Device: HOME// <Enter> TELNET DEVICE
                                               possible for this report is only 28
                                               days (assuming 4 weeks of data
Compiling timing stats.....
                                               accumulation before purging).
```

Figure 3-37: Detailed Daily Coversheet Load option—User prompts

The following example shows the actual report generated from the Detailed Daily Coversheet Load option:

Prime Time Oct 17, 2003 - Oct 17, 2003 Printed: 10/20/03								
Date	TTL Seconds	# of CV Loads	CV Percent					
10/17/03	0 to <10 10 to <20 20 to <30 30 to <40 40 to <50 50 to <60 60 to <70 70 to <80 80 to <90 90 or greater	8,682 6,273 1,238 374 175 77 51 30 18	51.2% 37.0% 7.3% 2.2% 1.0% 0.5% 0.3% 0.2% 0.1% 0.2%					
Incomplete 0  CV = Coversheet TTL = Time-to-Load  Press RETURN to continue:								

Figure 3-38: Detailed Daily Coversheet Load option—Report

This report provides the following data regarding detailed daily coversheet load data at a site in 10-second intervals for the specified day(s):

- Date—Specific day that the coversheet load began.
- TTL Seconds—Time-To-Load 10-second interval ranges.
- # of CV Loads—Total number of coversheet loads in the specified day(s) within each 10-second time interval.
- CV Percent—Total percentage of coversheet loads in the specified day(s) within each 10-second time interval.
- Total—Grand total of coversheet loads for the specified day(s).
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

If the report indicates an "excessive" time-to-load for a large percentage of coversheets, sites can run any of the other Timing Report options to get more specific information. What is considered "excessive" is site-specific (e.g., over 60 seconds or over 90 seconds, etc.).

For this report, the user chose to report detailed daily coversheet load data for a single day, 10/17/03 during prime time hours. The report shows that 51.2% (i.e., 8,682 coversheets) took less than 10 seconds to load. The report also shows that on that same day .2% (i.e., 37 coversheets) took 90 seconds or more to load. Overall, the report further shows that 95.5% of the coversheets loaded in less than 30 seconds.

<b>Detailed Hourly Coversheet Load</b>	[KMPD TMG HRLY TTL DETAIL]
(Synonym: <b>DTH</b> )	

The Detailed Hourly Coversheet Load option [KMPD TMG HRLY TTL DETAIL] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the hourly time-to-load values for the coversheet at a site. The report breaks the time-to-load metrics into ten second groupings.

The following example shows the prompts and user responses for the Detailed Hourly Coversheet Load option:

```
Select Timing Reports Option: Detailed Hourly Coversheet Load

Hourly Coversheet Time-to-Load (TTL) Detail Report

This detail report displays the hourly time-to-load values for the coversheet at this site. The report breaks the time-to-load metrics into ten second groupings.

Select End Date: (9/20/2003 - 10/19/2003): Oct 19, 2003// <Enter> (OCT 19, 2003) Select Hour(s) to Review: (0-23): 8// <Enter>
Device: HOME// <Enter> TELNET DEVICE Compiling timing stats...
```

Figure 3-39: Detailed Hourly Coversheet Load option—User prompts

The following example shows the actual report generated from the Detailed Hourly Coversheet Load option:

Hourly Coversheet Time-to-Load (TTL) Detail Report Oct 19, 2003 - Oct 19, 2003 Printed: 10/20/03							
Date	Hr	TTL Seconds	# CV Loads	CV Percent			
10/19/03	8	0 to <10 10 to <20 20 to <30 30 to <40 40 to <50 50 to <60 60 to <70 70 to <80 80 to <90 90 or greater	104 53 6 3 1 0 0 0	62.3% 31.7% 3.6% 1.8% 0.6% 0.0% 0.0% 0.0%			
167 100% Incomplete 0							
CV = Coversheet TTL = Time-to-Load							
Press RETU	RN to	continue:					

Figure 3-40: Detailed Hourly Coversheet Load option—Report

This report provides the following data regarding detailed hourly coversheet load data at a site in 10-second intervals for the specified hour(s):

- Date—Specific day that the coversheet load began.
- HR—Specific hour that the coversheet load began.
- TTL Seconds—Time-To-Load 10-second interval ranges.
- # CV Loads—Total number of coversheet loads in the specified hour(s) within each 10-second time interval.
- CV Percent—Total percentage of coversheet loads in the specified hour(s) within each 10-second time interval.
- Total—Grand total of coversheet loads for the specified hour(s).
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

As with all Timing Report options, sites can run any of the other Timing Report options to find out more specific information.

For this report, the user chose to report detailed hourly coversheet load data for a single hour, 8:00:00 a.m. to 8:59:59 a.m. on 10/19/03. The report shows that within that hour 62.3% (i.e., 104 coversheets) took less than 10 seconds to load. The report also shows that within that hour on the same day .6% (i.e.,

37 coversheets) took less than 50 seconds to load. Overall, the report further shows that 97.6% of the coversheets loaded in less than 30 seconds within that hour. Finally, the report shows that no coversheet took more than 50 seconds total to load within that hour.

Threshold Alert	[KMPD TMG TTL ALERT]
(Synonym: <b>TAL</b> )	

The Threshold Alert option [KMPD TMG TTL ALERT] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the particular coversheet loads that had excessive time-to-load values. This report searches for a particular person, client name, or Internet Protocol (IP) address. There is no upper limit on the Time-To-Load Threshold.

The following example shows the prompts and user responses for the Threshold Alert option:

```
Select Timing Reports Option: Threshold Alert
               Coversheet Time-to-Load (TTL) Alert Report
       This alerting report shows the particular coversheet loads
       that had excessive time-to-load values. This report will
       search for a particular person, a particular client name or
       IP address.
Select End Date: (9/20/2003 - 10/19/2003): Oct 19, 2003// T-3 <Enter>
Select Hour(s) to Review: (0-23): 8// <Enter>
Select Time-To-Load Threshold (Seconds): 60// <Enter>
                                                            Here the user chose the
                                                            day, hour of the day, and
     Select one of the following:
                                                            threshold amount (in
                                                            seconds) upon which to
                    User Name
                                                            report. There is no upper
          2
                    Client Name
                                                            limit on the Time-To-
          3
                    IP Address
                                                            Load Threshold.
                    Any Occurrence
Search By: 4// <Enter> Any Occurrence
                                                   Here the user chose to report on
Device: HOME// <Enter> TELNET DEVICE
                                                   any occurrence: user name,
                                                   client name, and IP address.
Compiling timing stats.....
```

Figure 3-41: Threshold Alert option—User prompts

The following example shows the actual report generated from the Threshold Alert option:

Coversheet Time-to-Load (TTL) Alert Report Oct 17, 2003 - Oct 17, 2003 Printed: 10/20/03 Any Occurrence: Threshold: 60 seconds						
Date	Time	User Name	Client Name	IP Address	Time-to-Load	
10/17/03	08:11	KMPDUSER,THREE	xxx-xx57738.v08	99.99.99.16	71	
	08:21	KMPDUSER, FOUR	xxx-xx56313.v08	99.99.9.108	63	
	08:29	KMPDUSER, FIVE	xxx-xx45760.gai	99.99.9.19	78	
	08:30	KMPDUSER, SIX	xxx-xx59283.v08	99.99.99.54	76	
	08:32	KMPDUSER, SEVEN I	xxx-xx57703.v08	99.99.99.33	64	
	08:35	KMPDUSER, EIGHT	xxx-xx48247.gai	99.99.9.225	63	
	08:37	KMPDUSER, NINE	xxx-xx57710.v08	99.99.9.229	87	
	08:38	KMPDUSER, NINE	xxx-xx57710.v08	99.99.9.229	87	
	08:39	KMPDUSER, TEN C	xxx-xx02.gaines	99.99.9.14	64	
	08:40	KMPDUSER,11	xxx-xx43202.gai	99.99.99.237	104	
	08:43	KMPDUSER,12	xxx-xx56231.v08	99.99.9.114	65	
	08:52	KMPDUSER,12	xxx-xx56231.v08	99.99.9.114	123	
	08:56	KMPDUSER,12	xxx-xx56231.v08	99.99.9.114	117	
Press RET	URN to	continue:				

Figure 3-42: Threshold Alert option—Report

This report provides the following data regarding threshold alert data at a site listing only those coversheet loads exceeding the threshold interval chosen by the user for the specified hour(s) on the specified day(s):

- Date—Specific day that the coversheet load began.
- Time—Specific time that the coversheet load began (hours and minutes).
- User name—Name of the person signed on to the client workstation loading the coversheet.
- Client Workstation—Name of the client workstation that loaded the coversheet.
- IP Address—Internet Protocol (IP) address of the client workstation that loaded the coversheet.
- Time-To-Load—Total elapsed time to load the coversheet; loads that went beyond the threshold interval.

This report allows sites to find "out of line" load times. They can then track down the problem (e.g., network problem, individual CPRS setting problems, etc.). Again, as with all Timing Reports, sites can run any of the other Timing Report options to find out more specific information.

For this report, the user chose to report on coversheet loads that exceeded 60 seconds between 8:00:00 a.m. and 8:59:59 a.m. on 10/17/03. The report shows that the longest coversheet load took 123 seconds at 8:52 a.m. KMPDUSER,12 signed onto the client workstation identified as "xxx-xx56231.v08" with an IP address of 99.99.9.114 and loaded that particular coversheet.

Real-Time Threshold Alert	[KMPD TMG TTL ALERT RT]
(Synonym: <b>RTA</b> )	

The Real-Time Threshold Alert option [KMPD TMG TTL ALERT RT] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the particular coversheet loads that have excessive time-to-load values for TODAY (real-time). This report searches for a particular person, client name, or Internet Protocol (IP) address.

The following example shows the prompts and user responses for the Real-Time Threshold Alert option:

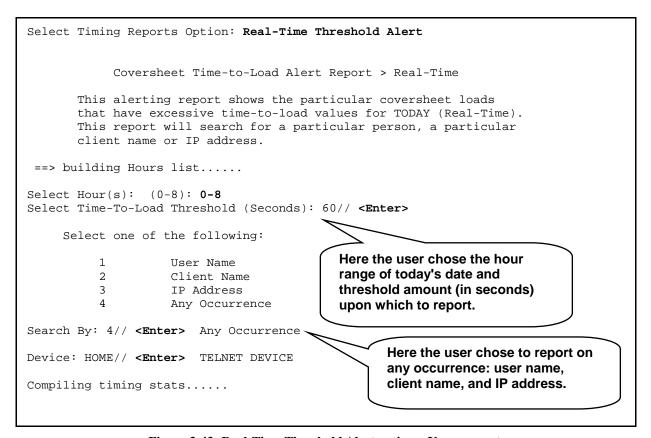


Figure 3-43: Real-Time Threshold Alert option—User prompts

This is a real-time report option. Thus, if it's 8:30 a.m. when the site runs this report option, the data will only be available from midnight to 8:00 a.m. However, if the option is run at 2:00 p.m. the data will be available from midnight to 1400 hours.

The following example shows the actual report generated from the Real-Time Threshold Alert option:

10/20/03 00:24 KMPDUSER,13			Hour(s	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second	7,8, Pri	
00:41 KMPDUSER,TEN C	Date	Time	User Name	Client Name	IP Address	Time-to-Load
00:57 KMPDUSER,TEN C xxx-xx02.gaines 99.99.9.14 78 00:59 KMPDUSER,14 xxx-xx45112.gai 99.99.9.59 143  02:01 KMPDUSER,15 xxx-xx50691.gai 99.99.9.232 69  03:45 KMPDUSER,13 xxx-xx50606.gai 99.99.9.154 74 03:51 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 65 03:57 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 61  04:02 KMPDUSER,16 xxx-xx45098.gai 99.99.99.17 61  04:02 KMPDUSER,17 xxx-xx45098.gai 99.99.99.15 161 04:10 KMPDUSER,18 xxx-xx55788.v08 99.99.99.120 437  Enter RETURN to continue or '^' to exit: <enter>  Coversheet Time-to-Load Alert Report &gt; Real-Time</enter>	10/20/03					70
00:57 KMPDUSER,TEN C xxx-xx02.gaines 99.99.9.14 78 00:59 KMPDUSER,14 xxx-xx45112.gai 99.99.9.59 143   02:01 KMPDUSER,15 xxx-xx50691.gai 99.99.9.232 69   03:45 KMPDUSER,13 xxx-xx50606.gai 99.99.9.154 74   03:51 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 65   03:57 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 61   04:02 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 61   04:10 KMPDUSER,17 xxx-xx45098.gai 99.99.99.15 161   04:10 KMPDUSER,18 xxx-xx55788.v08 99.99.99.120 437    Enter RETURN to continue or '^' to exit: <enter>  Coversheet Time-to-Load Alert Report &gt; Real-Time Hour(s): 0,1,2,3,4,5,6,7,8, Printed: 10/20/Any Occurrence: Threshold: 60 seconds  Date Time User Name Client Name IP Address Time-to-Ladder   0/20/03 04:19 KMPDUSER,19 xxx-xx47466.gai 99.99.99.82 113   04:22 KMPDUSER,23 s xxx-xx50606.gai 99.99.99.154 82   04:39 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 68   04:56 KMPDUSER,19 xxx-xx55831.gai 99.99.99.86 75   05:19 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 62   07:07 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 62   07:07 KMPDUSER,16 xxx-xx.v08. 99.99.99.17 62   07:08 KMPDUSER,16 xxx-xx.v08. 99.99.99.16 98   07:18 KMPDUSER,20 xxx-xx57678.v08 99.99.99.33 64   07:43 KMPDUSER,21 xxx-xx57678.v08 99.99.95.5 72</enter>		00:41	KMPDUSER, TEN C	xxx-xx02.gaines	99.99.91.14	72
02:01 KMPDUSER,15						78
03:45 KMPDUSER,13		00:59	KMPDUSER,14	xxx-xx45112.gai	99.99.9.59	143
03:51 KMPDUSER,16		02:01	KMPDUSER,15	xxx-xx50691.gai	99.99.9.232	69
03:57 KMPDUSER,16		03:45	KMPDUSER,13	xxx-xx50606.gai	99.99.9.154	74
04:02 KMPDUSER,17 xxx-xx45098.gai 99.99.99.15 161 04:10 KMPDUSER,18 xxx-xx55788.v08 99.99.91.20 437  Enter RETURN to continue or '^' to exit: <enter>  Coversheet Time-to-Load Alert Report &gt; Real-Time Hour(s): 0,1,2,3,4,5,6,7,8, Printed: 10/20/Any Occurrence: Threshold: 60 seconds  Date Time User Name Client Name IP Address Time-to-Load Alert Report &gt; Real-Time Printed: 10/20/Any Occurrence: Threshold: 60 seconds  Date Time User Name Client Name IP Address Time-to-Load Alert Report &gt; Real-Time Printed: 10/20/03 60 seconds  Date Time User Name Client Name IP Address Time-to-Load Alert Report &gt; Real-Time Printed: 10/20/04 for Seconds</enter>		03:51	KMPDUSER, 16	xxx-xx.v08.	99.99.99.17	65
04:10 KMPDUSER,18		03:57	KMPDUSER,16	xxx-xx.v08.	99.99.99.17	61
Enter RETURN to continue or '^' to exit: <enter>  Coversheet Time-to-Load Alert Report &gt; Real-Time</enter>		04:02	KMPDUSER,17	xxx-xx45098.gai	99.99.99.15	161
Coversheet Time-to-Load Alert Report > Real-Time		04:10	KMPDUSER, 18	xxx-xx55788.v08	99.99.9.120	437
10/20/03  04:19  KMPDUSER,19	Enter RET	TURN to	Coversheet Time-	-to-Load Alert Rep s): 0,1,2,3,4,5,6,		
04:22 KMPDUSER,23 S	Enter RET	URN to	Coversheet Time- Hour(s	-to-Load Alert Rep s): 0,1,2,3,4,5,6, Any Occurrence:	7,8, Pri	
04:22 KMPDUSER,23 S	Date	Time	Coversheet Time- Hour(s The User Name	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second	7,8, Pri ds	nted: 10/20/03
04:56 KMPDUSER,19	Date	Time  04:19	Coversheet Time-Hour(s Thr	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second Client Name	7,8, Pri ds IP Address 99.99.99.82	Time-to-Load
05:19 KMPDUSER,16	Date	Time  04:19 04:22	Coversheet Time-Hour(s Thruser Name  KMPDUSER,19 KMPDUSER,23 S	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second Client Name xxx-xx47466.gai xxx-xx50606.gai	7,8, Pri ds  IP Address  99.99.99.82 99.99.9.154	Time-to-Load
07:07 KMPDUSER,THREE	Date	Time  04:19 04:22 04:39	Coversheet Time-Hour(s Thruser Name  KMPDUSER,19 KMPDUSER,23 S KMPDUSER,16	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second  Client Name xxx-xx47466.gai xxx-xx50606.gai xxx-xx.v08.	7,8, Pri ds  IP Address 99.99.99.82 99.99.9.154 99.99.99.17	Time-to-Load
07:18 KMPDUSER,20 xxx-xx51177.gai 99.99.999.33 64 07:43 KMPDUSER,21 xxx-xx57678.v08 99.99.955 72	Date	Time  04:19 04:22 04:39	Coversheet Time-Hour(s Thruser Name  KMPDUSER,19 KMPDUSER,23 S KMPDUSER,16	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second  Client Name xxx-xx47466.gai xxx-xx50606.gai xxx-xx.v08.	7,8, Pri ds  IP Address 99.99.99.82 99.99.9.154 99.99.99.17	Time-to-Load
07:43 KMPDUSER,21 xxx-xx57678.v08 99.99.955 72	Date	Time  04:19 04:22 04:39 04:56	Coversheet Time-Hour(s Thruser Name  KMPDUSER,19 KMPDUSER,23 S KMPDUSER,16 KMPDUSER,19	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second  Client Name xxx-xx47466.gai xxx-xx50606.gai xxx-xx.v08. xxx-xx55831.gai	7,8, Pri ds  IP Address 99.99.99.82 99.99.9.154 99.99.99.17 99.99.99.86	Time-to-Load
·	Date	Time 04:19 04:22 04:39 04:56 05:19	Coversheet Time-Hour(s Thruser Name  KMPDUSER,19 KMPDUSER,23 S KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,16	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second  Client Name xxx-xx47466.gai xxx-xx50606.gai xxx-xx.v08. xxx-xx.v08. xxx-xx.v08.	7,8, Pri ds  IP Address 99.99.99.82 99.99.9154 99.99.99.17 99.99.99.17 99.99.99.16	Time-to-Load
07:59 KMPDUSER,22 xxx-xx50903.v08 99.99.99.13 96	Date	Time 04:19 04:22 04:39 04:56 05:19 07:07 07:18	Coversheet Time-Hour(s Thruser Name  KMPDUSER,19 KMPDUSER,23 S KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,20	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second  Client Name	7,8, Pri ds  IP Address 99.99.99.82 99.99.9154 99.99.99.17 99.99.99.17 99.99.99.33	Time-to-Load
	Date	Time 04:19 04:22 04:39 04:56 05:19 07:07 07:18 07:43	Coversheet Time- Hour(s Thr User Name  KMPDUSER,19 KMPDUSER,23 S KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,20 KMPDUSER,20 KMPDUSER,21	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second  Client Name	7,8, Pri  ds  IP Address 99.99.99.82 99.99.9154 99.99.99.17 99.99.99.17 99.99.99.33 99.99.955	Time-to-Load
08:01 KMPDUSER,24 xxx-xx55771.v08 99.99.9.157 108	Date	Time 04:19 04:22 04:39 04:56 05:19 07:07 07:18 07:43	Coversheet Time- Hour(s Thr User Name  KMPDUSER,19 KMPDUSER,23 S KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,16 KMPDUSER,20 KMPDUSER,20 KMPDUSER,21	-to-Load Alert Reps): 0,1,2,3,4,5,6, Any Occurrence: reshold: 60 second  Client Name	7,8, Pri  ds  IP Address 99.99.99.82 99.99.9154 99.99.99.17 99.99.99.17 99.99.99.33 99.99.955	Time-to-Load

Coversheet Time-to-Load Alert Report > Real-Time

Hour(s): 0,1,2,3,4,5,6,7,8, Printed: 10/20/03

Any Occurrence: Threshold: 60 seconds

Date	Time	User Name	Client Name	IP Address	Time-to-Load
10/20/03	08:04	KMPDUSER, 25	xxx-xx57600.v08	99.99.99.18	91
	08:06	KMPDUSER, 26	xxx-xx45092.v08	99.99.99.111	111
	08:10	KMPDUSER, 27	xxx-xx56195.v08	99.99.9.106	203
	08:11	KMPDUSER, 28 A	xxx-xx45078.gai	99.99.9.153	73
	08:14	KMPDUSER, 27	xxx-xx56195.v08	99.99.9.106	82
	08:15	KMPDUSER, 29	xxx-xx45753.gai	99.99.9.93	156
	08:16	KMPDUSER,30 L	xxx-xx55831.gai	99.99.99.86	75
	08:17	KMPDUSER,28 A	xxx-xx45078.gai	99.99.9.153	61
	08:18	KMPDUSER,31	xxx-xx57094.v08	99.99.99.91	70
	08:19	KMPDUSER, FOUR	xxx-xx57656.v08	99.99.9.17	95
	08:20	KMPDUSER, 32	xxx-xx59301.v08	99.99.9.234	66
	08:20	KMPDUSER, 24	xxx-xx55771.v08	99.99.9.157	63
	08:21	KMPDUSER,33 M	xxx-xx57893.v08	99.99.9.134	193

Enter RETURN to continue or '^' to exit: <Enter>

Coversheet Time-to-Load Alert Report > Real-Time

Hour(s): 0,1,2,3,4,5,6,7,8, Printed: 10/20/03

Any Occurrence: Threshold: 60 seconds

Date	Time	User Name	Client Name	IP Address	Time-to-Load
10/20/03	08:25	KMPDUSER,NINE	xxx-xx57710.v08	99.99.9.229	69
	08:26	KMPDUSER,34 N	xxx-xx53033.gai	99.99.999.244	68
	08:27	KMPDUSER, FIVE	xxx-xx45760.gai	99.99.9.19	61
	08:28	KMPDUSER, 22	xxx-xx50903.v08	99.99.99.13	72
	08:31	KMPDUSER, 25	xxx-xx57600.v08	99.99.99.18	68
	08:32	KMPDUSER,33 M	xxx-xx57893.v08	99.99.9.134	273
	08:33	KMPDUSER, 35	xxx-xxrx.gaines	99.99.9.54	61
	08:35	KMPDUSER, 26	xxx-xx45092.v08	99.99.99.111	162
	08:37	KMPDUSER, 36	xxx-xx56665.v08	99.99.9.91	65
	08:39	KMPDUSER, 37	xxx-xx51734.gai	99.99.999.110	69
	08:40	KMPDUSER, 38	xxx-xx54233.gai	99.99.99.82	70
	08:41	KMPDUSER, 39	xxx-xx50701.gai	99.99.9.71	66
	08:44	KMPDUSER, 12	xxx-xx56231.v08	99.99.9.114	117

Enter RETURN to continue or '^' to exit: <Enter>

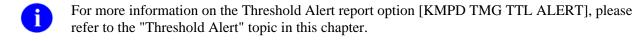
```
Coversheet Time-to-Load Alert Report > Real-Time
                 Hour(s): 0,1,2,3,4,5,6,7,8, Printed: 10/20/03
                      Any Occurrence:
                    Threshold: 60 seconds
Date
      Time User Name
                     Client Name
                                  IP Address
                                              Time-to-Load
______
10/20/03 08:45 KMPDUSER,40 xxx-xx57078.v08 99.99.9.129
                                                  106
       08:47 KMPDUSER,41 L xxx-xx50888.gai 99.99.99.86
                                                  61
       84
                                                   71
  Total Count: 50
Press RETURN to continue:
```

Figure 3-44: Real-Time Threshold Alert option—Report

This report provides the following data regarding threshold alert data at a site listing only those coversheet loads exceeding the threshold interval chosen by the user for the specified hour(s) on the day the report was run (real-time):

- Date—Today's date that the coversheet load began (real-time).
- Time—Specific time that the coversheet load began (hours and minutes, real time).
- User name—Name of the person signed on to the client workstation loading the coversheet (real-time).
- Client Workstation—Name of the client workstation that loaded the coversheet (real-time).
- IP Address—Internet Protocol (IP) address of the client workstation that loaded the coversheet (real-time).
- Time-To-Load—Total elapsed time to load the coversheet; loads that went beyond the threshold interval (real-time).
- Total—Grand total of report line items listed (real-time).

As with the Threshold Alert report option [KMPD TMG TTL ALERT], problems can be identified. However, because this is real-time report, sites can track what is going on throughout the day.



For this report, the user chose to report on coversheet loads that exceeded 60 seconds between the hours of 00:00:00 a.m. and 8:59:59 a.m. on 10/20/03. The report shows that the longest coversheet load took 437 seconds at 4:10 a.m. KMPDUSER,18 signed onto the client workstation identified as "xxx-xx55788.v08" with an IP address of 99.99.9.120 and loaded that particular coversheet.

Real-Time Average Hourly Coversheet Load	[KMPD TMG HRLY TTL RT]
(Synonym: <b>RAV</b> )	

The Real-Time Average Hourly Coversheet Load option [KMPD TMG HRLY TTL RT] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the hourly average time-to-load value for the coversheet at a site over a 24-hour period.

The following example shows the prompts and user responses for the Real-Time Average Hourly Coversheet Load option:

```
Select Timing Reports Option: Real-Time Average Hourly Coversheet Load

Real-Time Hourly Coversheet Time-to-Load (TTL) Report

This report displays the hourly average time-to-load value for the coversheet at this site over 24 hours.

Device: HOME// <Enter> TELNET DEVICE

Compiling timing stats.....
```

Figure 3-45: Real-Time Average Hourly Coversheet Load option—User prompts

This is a real-time report option. Data is only available from midnight to 8:00 a.m.

The following example shows the actual report generated from the Real-Time Average Hourly Coversheet Load option:

	Real-	Time Hourly Co			Report Printed: 10/20/03
Date	Hour		Seconds TTL Minimum		# of CV Loads
10/20/03	00 01 02 03 04 05 06 07	15 14 16 17 25 10 11 12 16	6 6 5 5 5 5 4 4 4 5	143 52 69 74 437 62 59 98 273	73 103 97 93 78 139 270 963 2,028
	Incomp	lete: 68			3,844
	versheet me-to-Loa				

Figure 3-46: Real-Time Average Hourly Coversheet Load option—Report

This report provides the following data regarding coversheet loads at a site for each hour of the specified number of day(s):

- Date—Today's date that the coversheet load began (real-time).
- Hour—Specific hour that the coversheet load began (00 23, real-time).
- TTL Average—Average time-to-load (in seconds) for each hour of the day (real-time).
- TTL Minimum—Minimum time-to-load (in seconds) for each hour of the day (real-time).
- TTL Maximum—Maximum time-to-load (in seconds) for each hour of the day (real-time).
- # of CV Loads—Total number of coversheet loads for:
  - Each hour of the day.
  - > Grand total for the entire day.
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

For this report, the user chose to report on the current day (10/20/03, midnight to 8:00 a.m.) of coversheet load data (real-time). The report shows that at 08:00 a.m. on 10/20/03, for example, there were a total of 2,028 coversheets loaded with an average time-to-load for each coversheet of 16 seconds. At that same hour the report also shows that the shortest coversheet time-to-load took only 5 seconds and the longest

coversheet time-to-load took 273 seconds (4 minutes and 55 seconds). Also, the report shows that there were a total of 68 coversheets that did not load to completion.

# CM Tools Background Driver [KMPD BACKGROUND DRIVER]

On a nightly basis, the CM Tools Background Driver option [KMPR BACKGROUND DRIVER] does the following:

- Moves the data within the ^TMP("KMPDH",\$J) collection global. to the CM HL7 DATA file (#8973.1).
- Moves the data within the ^KMPTMP("KMPDT") collection global to the CP TIMING file (#8973.2)

Upon completion, the data within both the ^TMP("KMPDH",\$J) and ^KMPTMP("KMPDT") temporary collection globals is purged.

Every Sunday night, the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] monitors and trims (records deleted) the following files to ensure that the correct maximum number of day's data is maintained as determined by the appropriate CP parameters:

- CM HL7 DATA file (#8973.1)—The maximum amount of data collected is determined by the Purge HL7 Data After CP parameter.
- CP TIMING file (#8973.2)—The maximum amount of data collected is determined by the Purge Timing Data After CP parameter.

Also, each Sunday night, the CM Tools Background Driver option automatically compresses the information contained within the CM HL7 DATA file (#8973.1) into weekly statistics. These weekly statistics are converted into an electronic mail message that is automatically transferred via network mail (i.e., VistA MailMan) and merged into a Capacity Planning National Database where this data is used for evaluation purposes.

The CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is *not* assigned to any menu. This option is scheduled through TaskMan to start the Capacity Management Tools software's background driver routine.

This option should be (re)scheduled with TaskMan's Schedule/Unschedule Options [XUTM SCHEDULE] located under the Taskman Management menu [XUTM MGR], see Figure 3-47.



The installation of the CM Tools software automatically sets the Background Driver job to run daily at 1:30 a.m. It does the same thing as TaskMan's Schedule/Unschedule Option, which saves the installer the job of having to set up the Background Driver job later.

This option lets users set the following TaskMan parameters in the OPTION SCHEDULING file (#19.2, see Figure 3-48 and Figure 3-49):

Parameter	Field Name (Number) (in File #19.2)	Description
QUEUED TO RUN AT WHAT TIME	QUEUED TO RUN AT WHAT TIME field (#2)	This is the date and time the user wants this option to be started by TaskMan. It should be scheduled to run every day at 1:30 a.m.
DEVICE FOR QUEUED JOB OUTPUT	DEVICE FOR QUEUED JOB OUTPUT field (#3)	The field is the name of the device on which the specified option will be queued to print by TaskMan. At the time of queueing, If TaskMan cannot identify a device by this name, the job will not be run. Only enter a device if the job needs an output device.
QUEUED TO RUN ON VOLUME SET	QUEUED TO RUN ON VOLUME SET field (#5)	This field is used to let the Task Manager know where to run the queued job. It is the Volume set [:node] upon which the user wants the job to run. Answer must be 2-15 characters.
RESCHEDULING FREQUENCY	RESCHEDULING FREQUENCY field (#6)	This is the frequency at which the user wants the job to automatically run. For the CM Tools Background Driver, this should be set to "1D" so that it will run every day. If this field is left blank, then the job will run only once.

Table 3-7: TaskMan parameters/fields, stored in the OPTION SCHEDULING file (#19.2)



For more information on TaskMan, please refer to the Kernel Systems Manual.



Capacity Planning Services *strongly* recommends that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] be scheduled to run every day at 1:30 a.m., because this background driver is the main mechanism by which the following sub-globals are purged nightly:

- ^KMPD(8973.1)—CM HL7 DATA file (#8973.1): Records are purged as prescribed by the Purge HL7 Data After CP parameter, which is stored in the HL7 WEEKS TO KEEP DATA field (#3.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].
- ^KMPD(8973.2)—CP TIMING file (#8973.2): Records are purged as prescribed by the Purge Timing Data After CP parameter, which is stored in the TIMING WEEKS TO KEEP DATA field (#4.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].

Modification of the frequency and time may have adverse effects on the size of the temporary ^KMPD(8973.1) and ^KMPD(8973.2) sub-globals and on the number of entries within the CM HL7 DATA file (#8973.1) and CP TIMING (#8973.2) files.

The following examples show typical displays when using TaskMan's Schedule/Unschedule Options option:

```
Select Systems Manager Menu Option: Taskman Management
          Schedule/Unschedule Options
          One-time Option Queue
          Taskman Management Utilities ...
          List Tasks
          Dequeue Tasks
          Requeue Tasks
          Delete Tasks
          Print Options that are Scheduled to run
          Cleanup Task List
          Print Options Recommended for Queueing
Select Taskman Management Option: Schedule/Unschedule Options
Select OPTION to schedule or reschedule: KMPD BACKGROUND DRIVER <Enter>
                                                                            CM Tools
Background Driver
                                                   At this point users are
        ...OK? Yes// <Enter> (Yes)
                                                   automatically placed into a
                                                   ScreenMan form, see Figure 3-48.
```

Figure 3-47: Running TaskMan's Schedule/Unschedule Options option to set up the CM Tools Background Driver—User prompts

After selecting the specific option in TaskMan's Schedule/Unschedule Options option, the user is automatically placed into the following ScreenMan form:

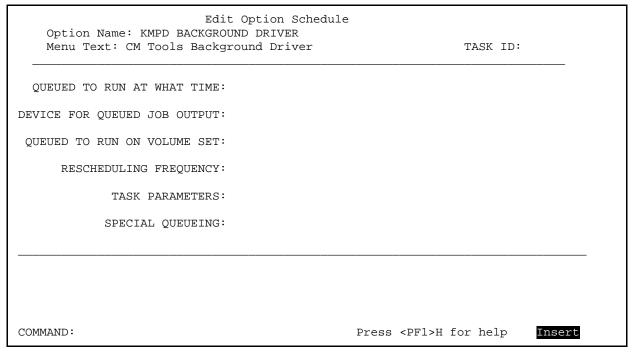


Figure 3-48: Sample TaskMan's Schedule/Unschedule Options option (ScreenMan)—User prompts, before scheduling the CM Tools Background Driver

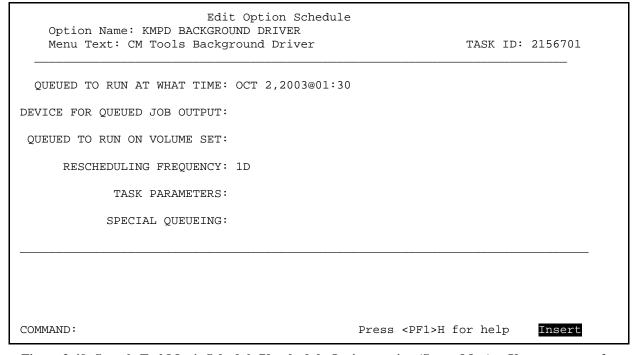


Figure 3-49: Sample TaskMan's Schedule/Unschedule Options option (ScreenMan) —User prompts, after scheduling the CM Tools Background Driver

CM Tools: Options

# Glossary

CAPACITY PLANNING

The process of assessing a system's capacity and evaluating its

efficiency relative to workload in an attempt to optimize system performance. (Formerly known as Capacity Management.)

CM TOOLS Capacity Management Tools. A fully automated support tool

developed by Capacity Planning (CP) Services, which entails the daily capture of VistA HL7 workload information from participating sites.

COVERSHEET The Computerized Patient Record System (CPRS) coversheet, which is

the main CPRS page. This main page is a screen of the CPRS patient

chart that displays an overview of the patient's record.

PRIME TIME HOURS Prime time hours are 8 a.m. to 5 p.m. Monday through Friday,

excluding holidays. Non-prime time hours are all other hours (i.e.,

weekends, nights and holidays).



For a comprehensive list of commonly used infrastructure- and security-related terms and definitions, please visit the ISS Glossary Web page at the following Web address:

http://vista.med.va.gov/iss/glossary.asp

For a comprehensive list of acronyms, please visit the ISS Acronyms Web site at the following Web address:

http://vista/med/va/gov/iss/acronyms/index.asp

Glossary

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